

THE UNIVERSITY
OF ILLINOIS
LIBRARY

370.5
ACA
v.1

PERIODICALS

The person charging this material is responsible for its return on or before the **Latest Date** stamped below.

Theft, mutilation, and underlining of books are reasons for disciplinary action and may result in dismissal from the University.

University of Illinois Library

SEP 29 1997

FEB 19 1993

FEB 08 1993

SEP 20 2004

L161—O-1096

THE
ACADEMY:

5739
772
LIBRARY
UNIVERSITY OF ILLINOIS
URBANA

A Journal of Secondary Education

ISSUED MONTHLY

UNDER THE AUSPICES OF THE

ASSOCIATED ACADEMIC PRINCIPALS

OF THE STATE OF NEW YORK.

VOLUME I.

FEBRUARY, 1886—JANUARY, 1887.

SYRACUSE, N. Y. :

GEORGE A. BACON. *ms*

	PAGE.		PAGE.
Evanston High School, Rhetorical Exercises in the. H. L. Boltwood.....	267	Latin Question, The. G. C. Sawyer.....	101
Farr, D. C., Graduation Day Honors in Glens Falls Academy.....	187	Latin, The Educational Value of.....	355
Flagg, I., Greek at Cornell University.....	115	Latin, The Pronunciation of, in Secondary Schools.....	18, 172
Floridas, The Five. J. D. Steele.....	54	Latin, The Teaching of. W. T. Peck.....	381
Ford, J. W., Graduation Day Honors in Colgate Academy.....	187	Lexicon Homericum. Ebeling.....	72
Forum, The.....	113, 190	Literary and Rhetorical Work in the High School. E. R. Payson.....	97
French and German Books on Questions of Secondary Education, Some Recent. S. Thurber.....	173	Love, S. G., Graduation Day Honors in Jamestown Union School and Collegiate Institute.....	187
French Teacher's Helps. S. Thurber.....	205	Lubbock, Sir John.....	314
Garnett, J. M., Notes on German Schools.....	289, 328, 373	Lynn Linton, Mrs. E., Higher Education of Women.....	297
German Schools, Notes on. J. M. Garnett.....	289, 328, 373	Manual Instruction.....	314
Germany, The Educational System of. C. K. Adams.....	33	Marble, A. P.....	113
Gildersleeve, B. L., On the Present Aspect of Classical Study.....	201	Married Women in the Public Schools.....	315
Glens Falls Academy, Graduation Day Honors in the. D. C. Farr.....	187	Massachusetts Association of Classical and High School Teachers.....	139
Greek Question, The.....	226	Massachusetts Half Mill Tax.....	193
Greek Statistics.....	73, 179	Massachusetts State Teachers' Association.....	381
Gurney, E. W.....	314	Massachusetts, The High Schools of.....	156
Harlow, W. B., Summer Schools.....	151	Mead, W. E., English Literature in High Schools.....	161
Harrington, H. F.....	113	Medical Schools, The Need of Higher Standards for Entrance to. W. H. Watson.....	215
Harrow, Contemplated Changes at.....	229	Merrill, M., The Effect on Preparatory Schools of Optional Examinations for Admission to College.....	121
Harvard College, Resolutions of the Board of Overseers.....	193	Michigan Schoolmasters' Club.....	193
Harvard College, The New Requirements for Admission to. S. Thurber.....	211	Michigan Schoolmasters' Club, Second Regular Meeting.....	356
Harvard, Electives at.....	108	Modern Language Notes.....	70
Heness, Th., The Natural Method.....	301	Montague, W. L., The Natural Method.....	305
Hewett, W. T., The Mutual Relation of the Colleges and Academies.....	361	Moss, C. M., Another Way of Beginning the Study of a Language.....	261
Hewett, W. T., The Natural Method of Teaching Modern Languages.....	340	Moss, C. M., Promotion by Term Work.....	299
Higher Education of Women.....	297, 274	Murray, D., Personal.....	69, 112, 272
Higher Education, The Relation of, to Religion. W. DeW. Hyde.....	241	Nation, The, and High Schools.....	72
Hill, F. A.....	157	National Educational Association at Topeka.....	222
Hinkel, Minna, The Natural Method of Teaching Modern Languages.....	347	Natural Method of Teaching Languages.....	301, 332
Holiday Conference, December 29 and 30, 1885.....	3	New York State Teachers' Association.....	221
Homerischen Realien, Die, Buchholz.....	73	Optional Examinations for Admission to College, The Effect on Preparatory Schools of. M. Merrill.....	121
Hudson, H. N., Obituary.....	25	Our First Vacation.....	199
Hutton, C. E., Rhetorical Exercises in Santa Rosa High School.....	269	Our First Word.....	1
Hyde, W. DeW., The Relation of Higher Education to Religion.....	241	Overwork Among English Teachers.....	229
Interchange, Graduation Day Honors in the Schools.....	183	Pasteur.....	191
Interchange, Rhetorical Exercises in High Schools and Academies. G. R. Cutting.....	264	Pasteur. Summary of Results at the Institute Pasteur.....	274
Interchange, The Natural Method of Teaching Languages.....	301, 332	Payson, E. R., How Far Can Literary and Rhetorical Work be Carried in the High School?.....	97
Jamestown Union School and Collegiate Institute, Graduation Day Honors in the.....	187	Payson, E. R., Graduation Day Honors in the Binghamton High School.....	185
Japan, Decree Regarding Longitude and Time.....	313	Peck, W. T., The Teaching of Latin.....	381
Japan, Educational Periodicals in.....	252	Philbrick, J. D., Obituary.....	70
Kapp, Marie F., The Natural Method.....	310	Physical Training in Education. Z. P. Taylor.....	212
Keep, R. P., Admission to College by Certificate.....	281	Political Science Quarterly.....	190
✓ Latin and Greek, The Successors of. S. Thurber.....	62	Programme for Literary Exercises.....	71
		Public Education, A Layman's View of.....	391
		Recent Changes in New York.....	224
		Regents, Abolishment of the Committee of Supervision.....	27
		Regents' Convocation, 1886.....	194-219
		Regents' Fund, Apportionment for 1886.....	19

Index to Volume I.

V

	PAGE.
Regents, Governor Hill and the	23
Regents' Increased Appropriation	27, 154, 192
Regents, Recent Criticisms on the	16
Rivista Pedagogica Italiana	189
Rochester Free Academy, Graduation Day Honors in the	188
Rollins, G. W., American History in Preparatory Schools	133
Rollins, G. W., National Aid to Southern Education	64
Russell, E. H., Investigation of the Habits of Children	273
Sachs Dictionary	113
Santa Rosa High School, Rhetorical Exercises in	269
Sauveur, L., The Natural Method	304
Sawyer, G. C., Graduation Day Honors in Utica Academy	188
Sawyer, G. C., The Excavations at Tiryns. Translation	321
Sawyer, G. C., The Latin Question	101
Schmeding, Die Klassische Bildung der Gegenwart	154
Science Supplement. Announcement of Science and Education	355
Science Teaching in England	273
Secondary Education, Department of N. E. A.	263
Sergi, G., Article in the Rivista Pedagogica Italiana	273
Sergi, G.	155
Siciliani, P., Obituary	70
Smith, C. T. R., Should Algebra Precede Geometry?	253
Smith College, New Science Hall	190
Smith, Sophia Physics	191
Some Lessons of a Recent Election. G. A. Bacon	177
Southern Education, National Aid to. G. W. Rollins	64
State Superintendency, The	66
Steele, J. D., The Five Floridas	54

	PAGE.
Steele, J. D., Obituary	195
Study of a Language, Another Way of Beginning the. C. M. Moss	261
Summer Educational Meetings, The	218
Summer Schools, W. B. Harlow	151
Syracuse High School, Graduation Day Honors in the	188
Taylor, Z. P., A Schedule of Composition Work	58
Taylor, Z. P., Graduation Day Honors in Rochester Free Academy	188
Taylor, Z. P., Physical Training in Education	212
Tenure of Office Among Teachers. G. A. Bacon	182
Thurber, S., French Teacher's Helps	205
Thurber, S., Rhetorical Exercises	271
Thurber, S., Some Recent French and German Books on Questions of Secondary Education	173
Thurber, S., The New Requirements for Admission to Harvard College	211
Thurber, S., The Successors of Latin and Greek	62
Tiryns, The Excavations at. E. Burnouf. Translated by G. C. Sawyer	321
Unification, Arguments for. G. F. Comfort	71
Unification, Paper on. G. F. Comfort	23
Utica Academy, Graduation Day Honors in the	188
Watson, W. H., The Need of Higher Standards of Education for Entrance to Medical Schools	215
White, H. S., Review of Schmeding	154
White, R. G., Words and their Uses	154
Wight, J. G., Graduation Day Honors in the Cooperstown Union School	187
Withers-Moore, Higher Education of Women	274
Women, Higher Education of	297, 274
Wright, F. N., Obituary	25

BOOKS NOTICED.

	PAGE.
Adams, John, Life of. J. T. Morse, Jr.	279
Adams, Samuel, Life of. J. K. Hosmer	279
Agassiz, Louis. His Life and Correspondence. Edited by Elizabeth Cary Agassiz	357
Algebra Tablet No. 1	75
Algebra Tablet No. 2	117
American Statesmen. Edited by J. T. Morse, Jr.	279
Arithmetic, Dillard's Exercises in	278
Arthur, J. C. Hand Book of Plant Dissection	236
Astronomy by Observation. Eliza A. Bowen	236
Baldwin, J. Essential Studies in English and American Literature	357
Barnes, C. R. Hand Book of Plant Dissection	236
Bowen, Eliza A. Astronomy by Observation	236

	PAGE.
Brackett, Anna C. Translation of the Philosophy of Education. By J. K. F. Rosenkranz	358
Britannicus. Racine	318
Browning, An Introduction to the Study of Robert Browning's Poetry. H. Corson	397
Buchheim, C. A. German Classics edited with English notes	357
Buchheim, C. A. Modern German Reader	235
Byron, Childe Harold. Edited by H. F. Tozer	235
Cæsar's Commentaries on the Gallic War. A. Harkness	398
Cæsar's Gallic War. Edited by F. W. Kelsey	237
Caspari, F. A. Habit and its Importance in Education, Translated from P. Radestock	239

PAGE.	PAGE.
Chemical Arithmetic, The Elements of. E. M. Coit.....	Habit and its Importance in Education. P. Radestock. F. A. Caspari.....
Chemistry, An Introduction to the Study of. I. Remsen.....	Hager, H. Die Karavane. W. Hauff.....
Chemistry, Elements of. J. H. Shep- ard.....	Hall, G. S. Hints toward a Select and Descriptive Bibliography of Educa- tion.....
Chester, A. H., A Catalogue of Min- erals.....	Hall, G. S., How to Teach Reading and What to Read in School.....
Cicero, Select Orations. Edited by J. H. and W. F. Allen and J. B. Greenough.....	Hamilton, Alexander, Life of. H. C. Lodge.....
Clark, J. S. A Practical Rhetoric for Instruction in English Composition and Revision.....	Hamlet, Shakespeare's Tragedy of. H. B. Sprague.....
Classical Atlas.....	Hanus, P. H., Elements of Determi- nants.....
Coit, E. M. The Elements of Chemi- cal Arithmetic.....	Harding, B. F. Greek Inflection.....
Cook, A. M. Latin Course. First Year.....	Harkness, A. A Complete Latin Course for the First Year.....
Collar, W. C. The Beginner's Latin Book.....	Harkness, A., Caesar's Commentaries on the Gallic War.....
Corson, H., An Introduction to the Study of Robert Browning's Poetry.....	Harkness, A., A Preparatory Course in Latin Prose Authors.....
Coulter, J. M. Handbook of Plant Dissection.....	Harris, Amanda B. Old School Days.....
Determinants, Elements of. P. H. Hanus.....	Hauff, W. Das Kalte Herz. W. N. van der Smissen.....
Dillard, J. H. Exercises in Arithmetic.....	Hauff, W. Die Karavane.....
Dreyspring, A. Easy Lessons in French.....	Herberman, C. G. Sallust's Jugurthine War.....
Education, Contributions to the Sci- ence of. W. H. Payne.....	Hill, G. A. A Geometry for Beginners.....
Education, A History of. F. N. V. Painter.....	Histoire d'un Ecolier. Hanovrien. An- drée Laurie.....
Education, Hints Toward a Select and Descriptive Bibliography of. G. S. Hall and J. M. Mansfield.....	History, Outlines of Mediaeval and Modern. P. V. N. Myers.....
Education: Intellectual, Moral and Physical. H. Spencer.....	History, English, The Leading Facts of. D. H. Montgomery.....
Education, The Philosophy of. J. K. F. Rosenkrans. Translation by Anna C. Brackett.....	History of the United States. A. John- ston.....
Educational Reformers, Essays on. R. H. Quick.....	History, Studies in General. Mary D Sheldon.....
England, A History of. A. P. Stone.....	History of the United States, Primary.....
English and American Literature, Es- sential Studies in. J. Baldwin.....	Hosmer, J. K. Life of Samuel Adams.....
Ethics, Outlines of the History of, for English Readers. H. Sidgwick.....	Jefferson, Thomas, Life of. J. T. Morse, Jr.....
Etymology, Essential Lessons in Eng- lish. J. G. R. McElroy.....	Johnston, A. A History of the United States for Schools.....
Franklin, Benjamin, The Autobiog- raphy of.....	Jugurthine War of C. Sallustius Cris- pus. C. G. Herberman.....
French, Easy Lessons in. A. Drey- spring.....	Kalte Herz, Das. W. Hauff, W. N. van der Smissen.....
Geikie, A. Class-Book of Geology.....	Karavane, Die. W. Hauff, H. Hager.....
Geography. G. W. Larison.....	Keep, R. P. Greek Lessons.....
Geography, Barnes' Complete. J. Mon- teith.....	Kelsey, F. W. Caesar's Gallic War.....
Geography, Barnes' Elementary. J. Monteith.....	King of the Golden River, The. Ruskin.....
Geology, Class-Book of. A. Geikie.....	Lady of the Lake, The. W. Scott. Edited by E. Ginn.....
Geometry for Beginners. G. A. Hill.....	Larison, G. W. Geography.....
Geometry, The Elements of. W. Wells.....	Latin, A Progressive Series of Induc- tive Lessons in. J. Tetlow.....
German Classics edited with English notes. C. A. Buchheim.....	Latin Book, The Beginner's. W. C. Collar and M. G. Daniell.....
Gewöhnung, Die, und ihre Wichtigkeit für die Erziehung. P. Radestock.....	Latin Course. First Year. A. M. Cook.....
Ginn, E. The Lady of the Lake. By Sir Walter Scott.....	Latin Course, A Complete, for the First Year. A. Harkness.....
Great Lives, A Course of History in Biographies. J. M. Mombert.....	Latin, First Steps in. R. F. Leighton.....
Greek Inflection. B. F. Harding.....	Latin Prose Authors, A Preparatory Course in. A. Harkness.....
Greek Lessons. R. P. Keep.....	Latin, The Study of in the Preparatory Course. E. P. Morris.....
	Leighton, R. F. First Steps in Latin.....
	Letter-Writing and Business Forms. Ward.....
	Lodge, H. C. Life of Alexander Ham- ilton.....

	PAGE.
Lodge, H. C. Life of Daniel Webster.	279
McElroy, J. G. R. Essential Lessons in English Etymology.	277
Minerals, A Catalogue of. A. H. Chester.	397
Modern German Reader. C. A. Buchheim.	235
Mombert, J. M. Great Lives. A Course of History in Biographies.	234
Monteith, J. Barnes' Complete Geography.	238
Monteith, J. Barnes' Elementary Geography.	238
Montgomery, D. H. The Leading Facts of English History.	118
Morris, E. P., The Study of Latin in the Preparatory Course.	398
Morse, J. T., Jr. Life of John Adams.	279
Morse, J. T., Jr. Life of Thomas Jefferson.	279
Myers, P. V. N. Outlines of Mediaeval and Modern History.	197
Numbers Applied. A. J. Rickoff.	233
Old School Days. Amanda B. Harris.	233
Packard, A. S. First Lessons in Zoology.	318
Pädagogische Carrière der Gegenwart, Die.	237
Painter, F. N. V. A History of Education.	234
Payne, W. H. Contributions to the Science of Education.	358
Pedagogy, The Elements of. E. E. White.	399
Pellissier, E. Britannicus. Tragédie par Racine.	318
Plant Dissection, Handbook of. J. C. Arthur, C. R. Barnes, J. M. Coulter.	236
Preparatory Latin and Greek Texts Required for Admission to American Colleges.	233
Psychology, Outlines of. J. Sully. J. A. Rhinehardt.	76
Psychology, Teacher's Handbook of. J. Sully.	198
Quick, R. H. Essays on Educational Reformers.	196
Racine. Britannicus, with notes by E. Pellissier.	318
Radestock, P. Die Gewöhnung und ihre Wichtigkeit für die Erziehung.	239
Reading, How to Teach Reading and What to Read in School. G. S. Hall.	399
Remsen, I. An Introduction to the Study of Chemistry.	158

	PAGE.
Rhetoric, A Practical, for Instruction in English Composition and Revision. J. S. Clark.	319
Rhinehart, J. A. Outlines of Psychology.	76
Rickoff, A. J. Numbers Applied.	233
Roland, The Song of. J. O'Hagan.	397
Roman Constitution, The Development of the. A Tighe.	278
Rosenkranz, J. K. F. The Philosophy of Education.	358
Ruskin. The King of the Golden River.	74
Sallust. The Jugurthine War. Edited by C. G. Herberman.	278
Satchel Guide, A.	199
Scott. The Lady of the Lake. Edited by E. Ginn.	75
Selections for Written Reproduction. E. R. Shaw.	234
Shakespeare. Tragedy of Hamlet. Edited by H. B. Sprague.	117
Shaw, E. R. Selections for Written Reproduction.	234
Sheldon, Mary D. Studies in General History.	78
Shepard, J. H. Elements of Chemistry.	75
Sidgwick, H. Outlines of the History of Ethics for English Readers.	278
Sight Reading, Selections from Latin Authors for. E. T. Tomlinson.	237
Smitten, W. N. van der. Das Kalte Herz. W. Hauff.	357
Spencer, H. Education.	318
Sprague, H. B. Shakespeare's Tragedy of Hamlet.	117
Stone, A. P. A History of England.	77
Sully, J. Teacher's Handbook of Psychology.	198
Sully, J. Outlines of Psychology. Edited by J. A. Rhinehardt.	76
Tetlow, J. A Progressive Series of Inductive Lessons in Latin.	159
Tighe, A. The Development of the Roman Constitution.	278
Tomlinson, E. T. Selections from Latin Authors for Sight Reading.	237
Tozer, H. F. Byron's Child Harold.	235
Ward's Letter-Writing and Business Forms.	75
Webster, Daniel, Life of. H. C. Lodge.	279
Wells, W. The Elements of Geometry.	318
White, E. E., The Elements of Pedagogy.	399
Zoology, First Lessons in. A. S. Packard.	318

THE ACADEMY:

A JOURNAL OF SECONDARY EDUCATION,

DEVOTED TO THE INTERESTS OF HIGH SCHOOLS, ACADEMIES AND ACADEMIC
DEPARTMENTS.

GEORGE A. BACON, . . . MANAGING EDITOR.

VOL. I.

FEBRUARY, 1886.

NO. 1.

OUR FIRST WORD.

With cap in hand and a respectful bow, with a little natural hesitation, too, the new comer presents himself at your school this morning. Of his welcome he can only make conjecture. He is country born and lacks the urban graces, but his hands are strong and his heart is in school. He does not ask for charity; he comes to work his way and only by helping others does he expect to pay his expenses and gain the respect of his companions. By further acquaintance you will judge of his fitness, and, if he is fit, we know you will be glad to keep him.

All figures aside, we propose to conduct a journal for those teaching youth in their teens, not forgetting the relation of that work with the earlier work, mindful also of the steps that may follow, but aiming chiefly, by suggestion and mutual aid, to raise the standard of secondary instruction and increase the efficiency of secondary schools.

We shall not treat of the importance of education to the individual or of its effects on the community, or urge the founding of more schools. We have little to say about "methods," popularly so-called, and nothing about the dignity of the profession. We address ourselves not to the public but to teachers, and our motto will be "*Non quid faciendum, sed quo modo,*" not what ought to be done, but how are we to do it? We take it for granted that the trials of one teacher are largely the trials of other teachers, that the remedies are usually within our reach if we were only wise enough to

know, and that the success of one ought to lead to the success of all. We shall aim above all to be practical, and if our readers miss the graces of style or search in vain for the grand truths of educational science in these pages, they can easily find them elsewhere. Our province is to remember that it is far easier to learn that children should be trained than to see how to train them, and often a lighter task to master the whole theory of discipline than to persuade a bad boy to be good. Within this field we hope for free inquiry and ready suggestion from fellow-teachers.

The criticism or reviewing of books designed for secondary schools will be made a specialty. Such reviews will in no case be made in the interest of any publishing house or of any scheme of methods. They will be the opinions of the manager in cases where no name is signed. Our aim in all cases will be to direct the attention of teachers to the best books, to commend such as from personal use we know to be good, and, in those we have not yet tried in the classroom, to praise the apparent excellencies while unsparingly pointing out what we deem defects. The guiding thought will be that books are made to benefit the reader or student, not the author, and that, while entertaining the kindest of feelings towards those who make books, our duty is rather to those who are to use them. The former deserve our thanks for their efforts, but that should not bias our judgment or dim the keenness of our sight.

Our work is hardly begun, but many kind words have greeted us. We begin modestly; we are not sanguine, only earnest. We do not expect to be "cumberers of the ground." There are more than half a million pupils and twenty thousand secondary teachers in the country, one-tenth of them in this State. For these we shall work, and, in attempting to represent primarily those of New York, we expect to present no less the wants and wishes of academic teachers throughout the Union.

And so in all frankness we ask for your support, and in all earnestness we purpose to deserve it. If you think we are doing a needed work, help us all you can. If not, let us alone, and we will withdraw from the field when our pledges are redeemed.

OFFICIAL REPORT

—OF—

FIRST HOLIDAY CONFERENCE

—OF—

ASSOCIATED ACADEMIC PRINCIPALS

OF THE STATE OF NEW YORK,

At Syracuse, N. Y., January 29th and 30th, 1885.

HENRY WHITE CALLAHAN, Secretary.

The first Holiday Conference of the Principals of High Schools and Academies in New York State, met at the High School in Syracuse, Tuesday morning, December 29th, 1885, forty-two principals and teachers being present. Principal George R. Cutting, of Auburn, was elected temporary Chairman and Principal H. W. Callahan, of Penn Yan, Secretary. The meeting was called to order at 10.45. Professor Cutting hoped that informal discussions of inside school work and brief remarks would characterize the proceedings. He said that a conference such as this had been a dream of his life, and that nothing but good could come of it to teachers and to the school interests of the State. He expressed the hope that a permanent organization would be effected, not for the present meeting only, but for all time, and that hereafter meetings would be held semi-annually. He read a list of topics for discussion, which had been submitted by principals from various parts of the State.

It was voted that a committee on permanent organization be appointed. Principals Taylor, Cobb, Emerson, Farr and A. M. Wright were named as such committee to report at the afternoon session. Voted that the Conference meet at 2 P. M. for afternoon session. Voted that the Conference proceed to the discussion of subjects presented. Voted that the Conference take up the question: "Are not academic schools running at too high pressure." Principal Farr, of Glens Falls, said there was no doubt of the fact that there was too high a pressure in our schools and academic institutions, but that it came from the outside and not from the inside. Teachers had been bearing the blame long enough; it was time now that the

responsibility be placed where it belonged—on the heads of parents who give society a preference over the school. "Good work," said the speaker, "cannot be expected of pupils who spend from two to four nights in social amusement. That is where the question of overwork comes in. Study, according to high medical authority, is conducive to health. While one student breaks down from overwork in the school, a score of others break down from causes entirely external to it. Three studies per day are not too many."

At Mr. Farr's request Dr. Bacon was called upon. He said the charge of overwork had been made in Syracuse and he had given all complaints careful attention. Students with the highest standing at the High School studied less than three hours a day out of school. Dr. Bacon found that the average amount of outside study necessary for pupils in his school was considerably less than two hours. And yet it was only a short time ago that a clergyman came to him and said that his children worked for eight or ten hours out of school time. He instanced the case of a girl who had actually broken down, but that, the Doctor explained, was because she had undertaken to do forty per cent. more work than was required of her, although her constitution was plainly too weak for such a task. A father, whose attention was called to the fact that his daughter was studying too hard, pooh-poohed the idea, and would not listen to the Doctor's remonstrances. Eighteen months later the girl was taken to her grave, and her death was laid at the door of the High School. In the case of another girl, the Doctor forced her parents into taking her away, and urged that she be given a rest from all mental exertion. The parents refused to follow his advice, and, when she broke down and died, charged her death to the High School. He finds that students are often overworked because they take more studies than the course requires and this by express desire of their parents. Parents encourage their children to go into society and are proud to see their names in the society columns of the Sunday papers week after week, claiming all the while that they are breaking down with overwork at school.

Dr. Verrill, of the Delaware Literary Institute, said he represented the old-fashioned academy. Judge Tourgee, he remarked, in his lecture "Give us a Rest," had made an arraignment of all schools for overwork, but said nothing about skating rinks, parties, etc. In his last twenty terms' work, only four students had suffered from over-study, and he was the first to warn them. That the fault with teachers was not in letting pupils go beyond their powers, but in not making them take proper exercise, and in not caring for their health.

Principal Cutting wished to know how many studies the principals allowed the students to take. Principal Taylor, of Rochester, said he allowed three regular studies, including in these rhetorical and composition work. Calisthenics are obligatory at Rochester, and he finds his students have good physiques and can do their work without complaint. Cases of discipline are few when there is sufficient exercise interspersed with intellectual work. Principal Best, of Clinton, said this charge is a favorite one with parents who wish to excuse the short comings of their children. He has

found that military drill has had a good effect in producing good physiques and instant obedience. Principal Emerson, of Buffalo, said it was the fashion, especially of physicians, to complain of overwork. He gave an account of the investigation of the subject in Buffalo. It was found that the average two hundred girls in school were in better health than the same number who were not in school. Trouble comes from the students taking more work than the teachers advise. Principal Winne, of Ilion, restricts his students to four studies. Principal A. M. Wright does not allow more than three studies, including rhetorical and composition work. Principal Clapp, of Phoenix, allows the strong bright students to take even five difficult studies; he thinks the ability of the students must be taken into consideration. Some can take five studies without detriment, while others can take only two. It is not necessary to have students recite every day, even in mathematics. With a bright class a subject might be given out and the class not called upon for several days. This gives them an extra division to study and may enable the students to take more subjects. He wishes more flexibility in academic courses of study. Care must be taken in assigning work. Principal Hill, of Havana, said that the strong scholar can take four and even five studies. Principal Edick, of Owego, said the teachers closed the skating rink by *requiring* the students to do the school work. He gave an instance of one strong scholar who had carried through very successfully a severe course of study without harm, but others could not follow her example. Principal Payson, of Binghamton, said they required only three studies, including all extra work.

It was moved and carried that Dr. J. Dorman Steele, Prof. George F. Comfort, and other ex-principals and educators present be invited to take part in the discussions. Dr. Steele said that, as a rule, he found teachers more thoughtful and careful of the health of their pupils than parents. He related an incident from his own early experience. The physical appearance of a little girl indicated that the vital forces were drawn from the rest of the body for the over development of her brain. He felt it his duty to advise the parent that she be taken from school. The advice was resented, but the pupil was withdrawn and sent to another school. Prof. Comfort said that after several years abroad he found himself very radical on the subject of education. He regarded all schools except purely professional ones as necessary evils. He would advocate a thoroughly elective course for all children, even in the lowest grades. Children should be put into the schools for which they are best adapted, whether schools of trade or learning. He sees great difficulty where there is only one class of schools, and all scholars must conform to one course. He does not believe in term-examinations. He thinks the cases are rare where students are harmed by overwork.

Conference adjourned till 2 P. M.

TUESDAY P. M.

Conference called to order at 2:30 P. M. Principal Cutting ex-

tended to the Conference the invitation of Professor and Mrs. Comfort to a reception at the Vanderbilt House at 9 P. M.

Voted that a committee of three be appointed to embody in resolutions the substance of the discussions, and that Dr. Bradley, of Albany, be chairman of that committee. On motion of Principal Bradley, the Conference extended thanks to Mr. and Mrs. Comfort and accepted their very kind invitation. The report of the committee on organization was read by Principal Emerson, of Buffalo.

CONSTITUTION.

1. This organization shall be known as the "Associated Principals of the High Schools and Academies of the State of New York."

2. The object of this organization shall be the promotion of the interests of secondary education and a closer acquaintance among the Principals.

3. Any Principal of a secondary school may become a member by the payment of an annual fee of fifty cents.

4. The officers of the Association shall consist of a President, a Vice-President, a Secretary and Treasurer, and an Executive Committee of three, all of whom shall be elected by ballot, annually, and discharge the duties usual for such officers. The President and Secretary shall also act as members of the Executive Committee.

5. There shall be two meetings of this Association in each year, one during the holiday intermission, the other in conjunction with the University Convocation.

6. This Constitution may be changed by majority vote of those present at any regular meeting, provided notice be given during first day's session.

Moved and carried that the report be accepted. Moved and carried that the articles of the Constitution be read and passed upon separately. Articles I. and II. were severally adopted. Article III. read and discussed by Principals Weinmann, Cutting, Hunt, Best, Bacon, Taylor, Hill, Colegrove and Verrill. Amended by inserting words "Any Principal of a secondary school," in place of "Principal of a high school or academy." Carried. Articles IV. and V. were severally read and adopted. Article VI. proposed and carried.

The Constitution as amended having been adopted, it was moved and carried that all ex-Principals and representatives of absent Principals be invited to sit in full membership with this body. Committee on organization proposed the names of the officers to be elected by ballot. Moved and carried that Principal Cobb cast one ballot for persons proposed. Officers elected:

President, Principal Cutting, of Auburn; Vice-President, Principal Wheelock, of Canajoharie; Secretary and Treasurer, Principal Callahan, of Penn Yan; Executive Committee, Principals Bacon, of Syracuse, Farr, of Glens Falls, and Payson, of Binghamton. Voted that the Conference this evening meet at 7 o'clock.

The President announced as Committee on Resolutions Principals Bradley, of Albany, Weinmann, of Schuylerville, and Hill, of Havana.

"The Good and Evil Effects of Regents' Examinations" was announced as the subject for discussion. Superintendent Hunt, of

Little Falls, said the best preparation for Regents' examination is honest, regular school work. Regents' examinations have lifted the secondary schools to a higher plane than in other states. Principal Ingalls, of Evans Academy, said these examinations were his only standard for advancement and graduation. President Cutting wished to know whether principals allowed students to try the examination before they had finished the subjects, and showed the evil effects of such a course. Dr. Verrill said that in the classics no one could enter by law until the subjects were completed. President Cutting asked Dr. Watkins, of the Board of Regents, if this rule held good in other subjects. Dr. Watkins replied that there was no such rule. Principal Barto, of Ithaca, thought that students should not be allowed to enter unless their standing reached a certain percentage; that these examinations thus used were a great help in raising the standard of scholarship. His students are not necessarily allowed to drop a subject when they have passed the Regents' examination. He does not make the Regents' diploma an essential for graduation. He wished that the examination papers were more uniform in the amount of knowledge required.

Principal Hill said the great fault was in making the examination the master rather than the servant in directing school work. One of the faults was the amount of red tape connected with the examinations. He mentioned the difficulty in getting a good supervising committee. He felt that the examinations were sufficiently severe. Dr. Verrill claimed that the supervising committee should be abolished. These committees are merely figureheads, and their presence is only a nominal matter. The responsibility should be thrown solely upon the teachers. The grammar should not be put into one examination session. It makes too long an examination. Principal Hill said that money should not be granted on the basis of the number who passed this examination. Dr. Watkins said that the officers of the Regents desired to put the entire responsibility of conducting these examinations on the teachers, but certain principals still wish the committees continued. Principal Larkins, of Fayetteville, said the average committees are so negligent that they even go to sleep during the examination. The responsibility should be thrown on the principals conjointly with the other teachers; no three teachers in any school in the State will swear to a lie. Principal McLachlan, of Seneca Falls, said that his Board of Education hires a committee, and thus gets a good one. He does not think that the teachers should bear all the responsibility, as it gives opportunity for suspicion in case many students pass. He thinks the Regents' examination should not be the only standard in a school. There should be a standard in school work as well as the Regents' Diploma. Principal Covell, of Manlius, asked if the Regents' Diploma was made *a sine qua non* for graduation in Seneca Falls. Principal McLachlan replied that it was, that students should do their work so thoroughly that they can pass the examinations. Principal Bradley thought the Conference should discuss the *system* of the Regents, and not minor details.

Professor Turnbull said he had heard that in some schools, for some time previous to the examination, all work but cramming was

dropped. That as a rule teachers are worth just as much to our Boards of Education as they can draw from the Regents, as the result of examinations. He claimed that the systematic presentation of a subject is impossible under the present system. There must be especial drill for the examination. Principal Covell said it was impossible to cram with reference to these examinations only. That we cannot make a class pass by specific drill upon old Regents' questions. He thinks regular work the best means of making students pass. He wishes to commend the reading at sight required at the end of the examinations in the classics; also the advance announcements of special themes in English Literature and History. He asked Dr. Watkins if the report was true that we are to have sets of questions in which students can make choices of twenty questions out of forty prepared. Dr. Watkins replied that this matter had not yet been so decided by the officers of the Regents. Principal Colegrove, of Marion, likes the present time of holding the examinations; for, if changes are made as proposed, pupils who come in from the country for one term can not prepare for them by the middle of January, and if neighboring schools have them at different times students would migrate from one institution to another, so as to take them. Dr. Watkins said that, in reply to the circular letter issued on this subject, 110 voted for the present times, 70 for two examinations, 13 for three and 18 for choice of times. Dr. Verrill moved that it is the sense of this Conference that the committees on Regents' examination be abolished. Carried.

Principal Shults, said there was very little cramming for the examinations at Norwich. Principal Farr: "Until I can make a better course than that laid out by the Regents of the University, aided by all the best educators of the world, I shall follow the present system. Educators of other states envy the power given our State in education by the Regents' examination." Principal Taylor, in reply to Principal Farr, said the system in Michigan was the best in the country. He does not approve the cramming on old Regents' question papers. The Regents' examinations have elevated scholarship, but he would still claim that there are great evils in the cramming system. Principal Callahan claimed that the Regents' questions, in the hands of a judicious teacher, form a very good text-book for general review. Superintendent Hunt said, "I am unqualifiedly in favor of the Regents' examinations. In our school their effect has been wholly salutary. It is the fault of unwise teachers, if they lead to cramming. Those classes that are thoroughly taught without any reference to a coming examination, are precisely the ones that succeed the best at the examinations. The Regents have raised the average scholarship of the pupils of our State to a point which, I think, is higher than that of any neighboring states. There are, as we all know, occasional flaws, but they are incidental to any system." Principal Edick said that the judicious use of the questions will make the students use all the text-books they can find. Principal Farr offered a resolution that, in the opinion of this meeting, the officers of the Regents should issue the Regents' diplomas in time for graduation. Principal Emer-

son also offered a resolution that the College Entrance Diploma be issued in time for students to present it on entering college. Both were carried. Dr. Watkins said the first plan would be impossible for want of time, but the second might be practicable. He desired the Principals to send on the names of students claiming such diplomas at the same time that they forwarded the papers. Principal Barto said the Academic Diploma and Preliminary Certificates were as necessary for college entrance as the "College Entrance Diploma."

Conference adjourned till 7 P. M.

TUESDAY EVENING.

Association called to order by President Cutting, at 7.00 o'clock. First subject for the evening: "How to promote regular attendance and diminish tardiness." Principal Cutting stated that the doors are closed in the Auburn schools at 9.03 A. M. and 2.03 P. M., so there is no such thing as tardiness; also that there is a decrease of absence as compared with the days when tardiness was allowed. Principal Ingalls asked if it was legal to close doors. Principal Cobb asked if the Auburn plan was used in other kinds of business. Superintendent Holden, of Plattsburgh said that his method was to create a sentiment against tardiness. He uses the monthly report system, which he found a great help in the matter. Principal McLachlan, of Seneca Falls, said their method was to let out school at 3.00 o'clock Friday, if no case of tardiness had occurred; but to keep until 3.30 if there had been a single case during the week. Principal Cutting said that names of students not absent were published in the Auburn papers. Ex-principal Clarke, of Canandaigua, gave a method used formerly in his school. The students were allowed to earn time by not being tardy; a given number of weeks without a tardy mark entitled the student to so much time of school. Principal Browning, of Suspension Bridge, asked if students might not injure their health under an undue stimulus in the direction of avoiding tardiness. Principal Covell cannot remember a case of tardiness thus far this year. He makes the students feel that it is their business to be on time. The idea of duty must be insisted upon in promptness as well as in other matters.

Principal Winne, of Ilion, did not believe in the Seneca Falls plan. He asked if falsehood were not implied, and if it were right to give as a stimulus the opportunity of taking a given amount of time out of school. Principal McLachlan could not see any falsehood in the plan. Principal Winne asked if it were just to keep all students for the tardiness of one. Principal Merri-man, of Homer, said that if students are regularly prompt it is just to shorten school hours as a reward. One method at Manlius was to read a continued story just before school opens. Principal Larkins was of the opinion that the Seneca Falls plan would induce students to stay away from school rather than be tardy.

The Association then took up the subject of composition work in academic grades. Principal Taylor, at the President's request, gave the system at Rochester. A schedule is made out of the four years' work. First, the students are required to prepare

a story to be read before the class. Next, a model of good English is read to the class,—as a description of scenery, &c. Its points of merit are shown and students are required to bring in descriptions of scenery similar in some respects. Other subjects are chosen that will train the students to observe closely and will enlarge their vocabulary, the teacher making constant use of good models of English. Students are encouraged to give their own ideas on given subjects. Then follow descriptions of character, argumentative style, and finally book reviews. He finds that this method gives them a good knowledge of English Literature before they take up the subject proper. The same method is carried on with respect to history and science. This method gives a facility of expression, increased vocabulary and a fair style of composition. It makes honest writers.

Principal Emerson asked whether Principal Taylor can find teachers to carry out this plan. Principal Taylor replied that a teacher was employed for this especial work. She has a system of marks by which the student can look up his own mistakes. Fifteen compositions are written during the school year. Students are occasionally allowed to criticise the work of other students. Dr. Verrill said that, when students are offered prizes for best standing, they would be very glad to mark their fellow students. Principal Bradley said that one of the great disadvantages of composition work is that students endeavor to write when they have nothing to write about. His students are marked on the thought, not on punctuation and capitalization. Time is given and the student is directed where to find thoughts on the subjects he wishes to take. All minor points are noticed, but the thought is the principal object to be reached.

Principal Bliesmer, of Groton, said that in Germany, during elementary training, the teacher develops the subject. Often teachers take students on excursions during half holidays and thus observation was developed. That if a student could not write much about the excursion, he was made to feel it was because he did not see much. Principal Morehouse, of Port Byron, believes in training the student in letter writing. During last summer vacation he received sixty letters from his students, which he corrected and returned. Principal Clarke spoke of students who come to school for one term only. He first finds out if the student knows anything; if there be any subject about which he knows more than others. One student who came from Syracuse "never wrote a composition, could not write." His father was a borer of salt wells. The Doctor asked him to tell them about it, and he wrote a series of papers which would have been creditable to any newspaper. Give a student a series of questions to answer. Reproduction of story read is good method. Principal Bradley, in reply to a question, said his students were required to hand in a composition once in four weeks.

Principal Larkin moved that the subject be carried on instead of passing to new subject. Carried. Moved and carried that the Association meet at nine o'clock to-morrow. President Cutting called Vice-President Wheeler to the chair and was himself excused.

Principal Covell, of Manlius, proposed to make the school the cor-

respondent of the town paper. Principal Winne gave as one method, requiring each student to make a box and hand it to the teacher with a description of the method of manufacture. Dr. Verrill said there had been in this department of study great progress; but fifteen essays are too many for one year. More time should be taken in preparing to write a composition, and when a teacher has a small number of pupils, he can talk with them one by one and ascertain what preparation they have made. Six essays per year he considered about the right number. Principal Edick uses one blackboard for matters of news, which the students are to fill up. Students will search the town over for leading newspapers, and vie with each other in telling it in the best style. Dr. Bradley said plagiarism is a matter of growth, it does not spring up in a day. Principal Taylor said that during the time of the epizootic he gave as subject "The Horse." He read the article from the encyclopædia to the class, asked who wrote it, and half a dozen raised their hands. Then he gave a subject "Euclid Avenue on a Winter Afternoon" with better success. Since then, he had learned to give subjects on which they could do no copying. Principal Edick said the trouble of copying could be avoided by letting students write on some subject, and then comparing. Principal Taylor emphasized the value of a rapid, easy, unstilted style, and thought it could not be obtained by writing few compositions. Adjourned till 9.00 A. M. Wednesday.

WEDNESDAY A. M.

Meeting called to order at 9.10 A. M. by President Cutting. First subject: "Should teachers mark in recitation? In making out standing, what effect should final examinations have?" Principal Cutting said he never marked in class, that with him the final examination affects standing one-half. Principal Norris, of Canandaigua, says he has the best work when he marks his classes; that during the first week of the term he does not mark, and the work does not begin in earnest until the second week. He does not feel that marking takes away the enthusiasm of class-work. Principal Cutting said he sometimes marked after the recitation. Principal Farr asked if a teacher could not carry the standing of a class in mind, so that he could give it at any time. Principal Norris said this was his system; but he felt that he must have the marks in black and white. Principal Emerson said that in Buffalo the standing was mostly determined by weekly written examinations, and they have records thus kept for twenty-five years. Absences are referred to class teachers who can deduct what they think best for the time absent. Absences for a day take one from final average.

Principal Verrill said that the method of allowing one-half for final examination was unjust, for a student could do poor class-work and then bring up on examination. At Franklin he allows only one-fifth for examination, and marks during the recitation, for he thinks he can be more just. "Try and carry a store account in mind," said he, "and see if you do not make mistakes." Principal Verrill marks on a scale of five. He told of a Professor at Bowdoin who always marked on impressions received during the first five weeks. He marks ab-

sentees zero in recitation and his students make up lessons, but they must have good excuses. Dr. Bacon, of Syracuse, would never mark zero for absence. He would keep absence, deportment, and scholarship records entirely separate. He claims that under Dr. Verrill's plan a student can get good standing if perfect and present during a half term only. Dr. Verrill said he did not give "standing" for parts of terms. Principal Taylor, said it was not fair to mark a scholar who is absent for work given in a class by teacher, while such student is absent. He does not think students should be marked down in "general standing" for deportment. They would respect teachers who always gave them their exact dues. He uses a system of cards in calling up so neither teacher nor student knows who is to be called. Under this system examinations do not differ two per cent. from regular work. Regular work must be done in order to pass the term's examinations. Principal Callahan, of Penn Yan, said he felt the marking would be as just by the teacher's individual idea of the rank as by adding and dividing the marks of each recitation to get an average result. Principal Barto said that at Ithaca marks depend upon weekly reviews. Students can thus make up their work and get the full value in any recitation lost. Dr. Bacon said the marking system should not be considered as a matter of reward, but simply as a record. Principal Edick marks on ten written recitations during a term.

President Cutting wishing to learn methods used in marking obtained by vote the following results:—

Number who mark <i>during</i> recitation,	- - - - -	12
Number who do not mark during recitation, but mark daily recitations,	- - - - -	7
Number who mark on examination,	- - - - -	18
Number who mark down in "standing" for absences,	- - - - -	12
Number who keep absences and standing separate,	- - - - -	22
Number who do not let absences affect scholarship record,	- - - - -	19
Number who have a method of personal communication with parents,	- - - - -	21
Number who do not communicate with parents,	- - - - -	15

Several do not communicate with parents except as necessity arises.

Moved that an afternoon session be held from 2 to 4 P. M. Amended that the morning session continue till one o'clock with no afternoon session. Carried. Next subject: "The work in Teachers' Classes." Principal Covell, wished to ask principals if teachers' classes pay financially? Fourteen principals have teachers' classes and three think it pays. Principal Callahan thought it did pay at Penn Yan, for it required but two extra recitations and enabled them to hire an extra teacher who could devote the other divisions of the day to general school work. Principal Warne, of Fairfield Seminary, did not think the law governing teachers' classes definite enough. Dr. Verrill thought it was too definite. Principal Shults, says the teachers' class pays his school \$600 per year. It helps him in his other school work and helps the county by raising the standard of the teaching. Principal Colegrove, makes his teachers' class take notes on lectures and then leave

the notes. Principal Farr said the first object of a teachers' class was giving help to those who need help, young men and women of limited means who aspire to teach. He deplored the necessity of their being obliged to pass Regents' examinations. Students who came into these classes are not used to written examinations. The State Inspector of Teachers' Classes, Charles E. Hawkins, said that the requirements in History and Civil Government can be covered by the regular school work. So the only extra requirement is a division of forty-five minutes in methods. We do not need a syllabus in methods. There is a definite syllabus in other subjects. Principal Morehouse, said the teachers' class work does more good than any other branch of instruction, even than the institute work. He asked the inspector if students must be sixteen and eighteen years of age at the opening of the term to comply with the law governing teachers' classes? Inspector Hawkins said if they become this age before the State testimonial is awarded the law is satisfied. Principal Cafrey, of Rushville, thought the requirements in teachers' classes were too low. Principal Clarke thinks teachers' classes do not pay financially. A teacher must use his own method and not try and teach some one's else method. Inspector Hawkins said that teaching methods is left entirely with teachers. Most school commissioners of the State endorse the Regents' teachers' class testimonials. This is especially true where the school commissioners help in conducting the classes. There are to be hereafter two Regents' testimonials in teachers' classes, of different grade, specifying the proficiency of the candidates, students to receive one or the other according to the rank in scholarship.

Albert B. Watkins, Assistant Secretary of the Board of Regents, addressed the Association upon the subject of an increased State appropriation for the secondary schools under the charge of the Regents. He stated that the Regents were favorable to such an increase, but that the matter would hinge largely on the influence brought to bear upon assemblymen and senators by the principals. He was followed by Dr. Verrill, Dr. Bacon, Principal Hill, Dr. Clark, and others. The question of closing Union Schools for Teachers' Institutes, pursuant to the recent law passed, was discussed by Principal Gardner Fuller, Principal A. M. Wright, Principal A. W. Morehouse, and others. Principal Clapp, of Phoenix, offered a resolution relative to the recent law governing the attendance of Teachers' Institutes, which was subsequently amended by Principal I. H. Clark, of Lyons, and passed as follows:—

Resolved, That the school law should be so amended that Union schools shall not be required to close during the sessions of Teachers' Institutes.

The President invited the attention of the Association to the question of establishing a journal in the interest of secondary education, and called upon Principal Bacon, who presented his view of a High School paper. He was followed by Principal Edick, and C. W. Bardeen, of the *School Bulletin*. Principal A. C. Hill, of Havana, offered the following resolution which was passed:

Resolved, That the Associated Principals of the State, express

their approval of the plan to establish a paper in the interests of secondary schools and pledge their hearty support to the movement.

Principal Morehouse, offered a resolution that the balance in the treasury be appropriated to aid in publishing the first number of the proposed paper. Remarks were made by Principal Bacon. Mr. Bardeen amended that this paper become the official paper of the Associated Principals. Dr. Bacon said he would assume all financial responsibility of the undertaking. Mr. Clapp proposed that the official report of this holiday conference be included in first copy, and that the Executive Committee have power to appropriate any money for said paper.

The committee on resolutions offered the following report:

Resolved, That the thanks of the association are due to the Principal George R. Cutting, for his foresight and courage in taking the laborious initiatory steps which have led to the formation of this association, and we congratulate him on the complete success of his project.

Resolved, That thanks should be extended to the Board of Education of this city for the use of this building for its meetings, and to Dr. George A. Bacon for his thoughtful attention to the comfort and convenience of the association.

Resolved, That the thanks of the association be extended to Professor Comfort for his courteous hospitality extended to the association last evening.

Resolved, That the deliberations and interchange of views here enjoyed have enabled the association to reach the following conclusions:

1. The charge of health-destroying overpressure in secondary education is unjust for the following reasons: (1) Most cases of ill health charged against the schools are directly traceable to other causes, prominent among which are giving undue attention to the demands of society, keeping late hours and other dissipations. (2) The few cases in which students are injured by over-study are due to such causes as these: Having poor health to begin with, taking more work than the course requires, and taking studies out of school.

2. The system of examinations administered by the Regents has been productive of great benefit to the educational interests of the State. By affording a series of tests prepared by disinterested parties familiar with the schools to be examined, these examinations have revealed and strengthened the weak points in the work in the various schools and greatly elevated educational standards throughout the State. It is the judgment of this association that the committee required by the rules of the Regents might be advantageously dispensed with.

3. This association desires to place on record its emphatic conviction that the Regents' intermediate certificate or other equally severe test should be required of all candidates for teachers' positions in the schools of this State, and that no person under twenty years of age should be permitted to teach.

4. It is desirable to reduce tardiness to a minimum, but some of the methods proposed lead to greater evils.

5. Composition work is of great importance in the secondary

schools and should be taught from the lowest to the highest grades. The amount of work in this department varies from five compositions a week to one per term. The following suggestions were made:

a A pupil should not be required to write on a subject he does not understand.

b The subject should be assigned long in advance.

c Sources of information should be given.

d Subjects familiar to pupils, or in line with other school work, should be assigned.

e Outlines may be given.

6. It is the opinion of this Conference that, in accordance with the policy of the State from an early period in its history, it is the duty of the State to foster the interests of secondary education, and that we earnestly commend to the Legislature the desirability of an increased appropriation for the encouragement of the secondary schools of the State.

Respectfully submitted,

JOHN E. BRADLEY,
J. H. WEINMANN,
A. C. HILL,

Committee on Resolutions.

Principal Cutting said, in commending these resolutions, that this Conference and its work had tended to exalt the profession of the teacher. The resolution pertaining to age of teachers was actively discussed by Principals Bacon, Bradley, Shults, Colegrove, Callahan, Benham and Clark. Moved that the resolution on requirements for admission to teach be stricken out. Discussed by Principals Colegrove, Shults and Bradley. Motion lost. Moved by Principal Benham that the part of the resolution concerning age necessary to teach be stricken out. Discussions by Principals Cobb, Bacon, Callahan and Bradley. Motion amended that age be eighteen instead of twenty. Amendment lost. Motion lost. Motion carried to adopt the resolutions.

Principal Fox Holden, moved that a committee of three be appointed to confer with the Regents concerning abolishing the Regents' Committee at the examinations. Carried. Voted that the chair appoint such committee. Chair appointed Principal John E. Bradley, of Albany, Principal Fox Holden, of Plattsburgh, and Principal Charles D. Larkins, of Fayetteville. Dr. J. Dorman Steele, alluding in most graceful terms to the position of himself and his friend Dr. Clarke, proposed that at the next meeting the constitution be so amended that ex-principals may become members of this body. The President thanked Dr. Steele for the suggestion. Principal N. L. Benham, wished to announce that the State Association meeting next summer would be held at Niagara Falls, but not on the week of the Convocation, and extended a cordial invitation to all present.

Dr. Bacon offered the following:

Resolved, That it is the sense of this meeting that the next State Superintendent of Public Instruction be emphatically a school man. Adopted unanimously.

Moved that the Principals of Albany, Buffalo, Rochester and

Syracuse be constituted a committee to publish this resolution through the associated press dispatches.

Conference adjourned to meet with the University Convocation at Albany.

RECENT CRITICISMS ON THE REGENTS.

It has always been the fashion in certain quarters to speak slightly of the Board of Regents. Politicians of a certain type, both Democrats and Republicans, periodically have their fling at it; newspaper men, anxious to take a turn at education, rend it in pieces with frenzied eagerness; teachers of a well-known class see nothing good in formal examinations, rigid marking and minute supervision of details; other teachers, harassed by red tape to which they are unaccustomed, annoyed by the failure of some class on a favorite subject, or suffering under some necessary restriction, overworked as they invariably are, have their momentary querulous complaints, eagerly caught up and magnified by opposers of the system.

We have never placed ourselves among those who think the Board of Regents above criticism. The system has its defects; but if the fault-finding were limited to those who can name the Regents and who know their functions, it would at least be more intelligent. Men are apt to forget that ideal education nowhere yet exists, that there is a wide difference in schools, and that where one teacher has outgrown the help of the Regents, there are a hundred who still need it. It is easy for a city school with a large corps of teachers, all specialists, with constant mutual stimulus and scores of daily opportunities for improvement, to sneer at the idea of Regents' supervision. It is no hardship, it may be, for them to give up the yearly decreasing pecuniary aid. The Board of Regents was not created with them in view. But in the vast majority of schools there are no such conditions. In most of them teachers are not specialists, there are few opportunities for them and little mutual stimulus.

Nor should we forget the change wrought by the Regents in this State in the last twenty-five years. I need only follow back the duplicate reports in my office to learn how year by year their methods have changed in accordance with the demands, and how quietly the various exigencies have been met. I did it the other day, and the task would be a fortunate one to any person who thinks the system was ever in danger of fossilization. Still greater is the change in methods and results forced upon the *schools* in the same period. Some schools no longer need this outside influence, but most both need it and feel their need. And let those who have outgrown the

help, turn round and fulfil the moral obligation which lies upon every man who has profited by the labors of others, let them contribute all they can to bring others up to their own vantage ground.

It is said in various circles that this venerable body is a mere figure-head, that it has no real function, is composed of fossils and old fogies. To the latter charge, those who have read the names on the back of a Regents' certificate will find an answer, if they are fairly intelligent, and to the former those who attend one of the business meetings of that body will need none.

Criticisms on the examinations are often made, and properly, too, it seems to us. Only by criticism can there be improvement, and, in a progressive science like education, without improvement no system can long be helpful. But the criticism in all fairness ought to come from those who know the conditions, and, in order to be profitable, must suggest something better. Such criticism has been repeatedly given with severe frankness, and as uniformly has received courteous attention. But faults in examination papers, however undesirable, do not entitle the system of examinations to utter condemnation. An examination has always two functions; it is a test of work done and a suggestion for the future. It helps the wise teacher not less than the pupil. It shows him the deficiencies of his instruction and gives him new ideas of the scope of the study. When that rare and gifted teacher, Professor Price, of Union College, whose death we still mourn, examined in Geometry for the Inter-Academic Union four years ago, the oldest teacher present felt the inspiration.

The whole idea of reward and punishment should be banished from our conception of examinations. They are simply tests of both teacher and pupil, and to be of high value must always suggest deficiency. To have no pupil miss a single question in an examination might be gratifying, perhaps, to the teacher's pride; but to have every pupil fail on some point will always set a good teacher to thinking. If scholars' lives are to be forever blighted by a failure "to pass," the examinations should either be greatly modified at once, or abolished altogether. But if examinations are simply a means to an end, to be regarded only as means, with the end of true education and real advancement and profit always in view, let us use them as such and treat them as stepping stones. The intense rivalry between schools, and the desire of teachers to get pupils "through," offer a very unfortunate complication. Lack of interest and carelessness as to results are fatal, but the other extreme must be avoided. Discarding the Regents' supervision may change the direction of the evil, but give little promise of eradicating it. It is inherent.

No one has ventured to question the ability or integrity of this

department. In all its history there is no suspicion of a dollar misappropriated, or trace of favoritism. No trust in our commonwealth has ever been administered with intenser fidelity to its objects or with more rigid economy. There has been no waste, no extravagance, no seeking of private ends, no struggling for influence or prestige, no sacrifice of the future to the present. That it has not accomplished more is due to the limitations placed upon it; that it has accomplished so much is evidence of the wisdom and fidelity of those administering it. And never has it stood better in all these regards than at present. In the vast and responsible task of carrying out in practical detail the ideas of the Board, no men have been better equipped or more thoroughly conscientious than the present Secretary and Assistant Secretary. Dr. Murray, throughout a life devoted to educational work, has united to high literary and general culture combined with broad ideas and intimate knowledge of the needs of school work, a courtesy that has brightened all the routine of a varied and complicated system, and won the hearty esteem of all the teachers of the State. It is no disparagement to either the living or the dead to say that no educational trust in this State has ever been held by a man of more thorough scholarship, wider opportunities for culture, or more genial personal qualities. The unobtrusive work of his assistant, Dr. Watkins, commends itself for careful supervision of details and an earnest desire to learn, if possible, a "more excellent way." The loss of these men in educational influence all through the State would soon make itself keenly felt.

To grumble at the existing state of things, whatever it may be, is the hereditary right of Americans handed down from the sturdy stock across the Atlantic. It is a sign of health and general prosperity. But to criticise and improve, rather than demolish, is also an Anglo-Saxon trait. We are apt to lose sight of the progress we are making in looking at the ideal possibilities we would gladly reach. It is hardly wise, however, to throw down the ladder on the steps of which we are surely and steadily rising.

An inquiry among the principals present during one session of the recent Holiday Conference in this city, revealed the following:

Academic pupils.....6,379

Classical pupils.....2,319

Number trained in the Roman pronunciation of Latin 1,328

“ “ “ English “ “ 991

Thirteen of the schools represented at the Conference do not teach Greek.

THE ANNUAL APPORTIONMENT OF THE REGENTS' FUND.

We give below an alphabetical list of the schools receiving income for the Literature Fund January, 1886. In the right-hand column will be found the amount received on advanced examinations, next the number of scholars in each school holding preliminary certificates, and before each school its numerical rank in the list. The amount received on each preliminary certificate is every year decreasing; here it is a little less than \$2.60.

36. Adams Collegiate Institute,.....	73	99 55
62. Addison Union School,.....	52	115 18
47. Adelphi Academy, Brooklyn,.....	61	
104. Afton Union School,.....	36	14 81
28. Albany Academy,.....	86	
1. Albany High School,.....	533	495 27
38. Albion Union School,.....	70	34 55
6. Alfred University, Academic Department,.....	167	40 31
225. A. M. Chesbrough Seminary,.....	8	
182. Amsterdam Academy,.....	18	13 16
100. Angola Union School,.....	38	41 14
225. Arcade Union School,.....	8	
251. Argyle Academy,.....	2	
92. Attica Union School,.....	42	42 78
72. Auburn Academic High School,.....	50	
239. Ausable Forks Union School,.....	5	
162. Avon Union School,.....	21	21 39
100. Bainbridge Union School,.....	38	51 83
55. Baldwinsville Free Academy,.....	57	37 84
15. Batavia Union School,.....	121	169 48
10. Binghamton Central High School,.....	148	
134. Boonville Union School,.....	27	9 87
154. Brookfield Union School,.....	23	69 11
11. Brooklyn Collegiate and Polytechnic Institute,.....	145	
3. Buffalo High School,.....	371	348 83
211. Cambridge Union School,.....	11	
217. Camden Union School,.....	10	
102. Canajoharie Union School,.....	37	23 04
113. Canandaigua Academy,.....	34	29 62
178. Canaseraga Union School,.....	19	6 58
104. Canastota Union School,.....	36	29 62
142. Candor Free Academy,.....	25	42 78
51. Canisteo Academy,.....	59	59 23
57. Canton Union School,.....	56	51 01
193. Carthage Union School,.....	15	
207. Cary Collegiate Seminary,.....	12	3 29
119. Castile Union School,.....	31	26 33
129. Catskill Free Academy,.....	28	6 58
225. Cayuga Lake Military Academy,.....	8	3 29
12. Cazenovia Seminary,.....	142	97 08
88. Chamberlain Institute,.....	44	22 21
142. Chateaugay Union School,.....	25	48 54
207. Chester Union School,.....	12	16 45
134. Cincinnati Academy,.....	27	21 39
82. Claverack Academy and Hudson River Institute,.....	46	80 62
178. Clinton Grammar School,.....	19	
92. Clinton Liberal Institute,.....	42	62 53
82. Clyde High School,.....	46	74 04
72. Cobleskill Union School,.....	50	115 18
202. Colgate Academy, Hamilton,.....	13	
62. Cook Academy, Havana,.....	52	3 29
33. Cooperstown Union School,.....	75	113 53
60. Corning Free Academy,.....	53	39 49

225.	Coxsackie Union School,	8	
225.	Crown Point Union School,	8	3 29
170.	Cuba Union School,	20	33 73
236.	Dansville Seminary,	6	
97.	Delaware Academy,	41	42 78
67.	Delaware Literary Institute, Franklin,	51	49 36
178.	Deposit Union School,	19	
207.	De Ruyter Union School,	12	3 29
149.	Dryden Union School,	24	28 80
78.	Dundee Preparatory School,	47	54 30
32.	Dunkirk Union School,	77	41 14
162.	East Aurora Union School,	21	
231.	East Springfield Academy,	7	
60.	Egberts High School,	53	62 53
231.	Elizabethtown Union School,	7	13 16
225.	Ellington Union School,	8	
13.	Elmira Free Academy,	140	21 39
239.	Evans Academy, Peterboro,	5	
231.	Fairfield Seminary,	7	
92.	Fairport Union School,	42	
124.	Fayetteville Union School,	29	24 68
90.	Flushing High School,	43	51 01
104.	Forestville Free Academy,	36	47 72
98.	Fort Covington Free Academy,	39	57 59
75.	Fort Edward Collegiate Institute,	48	3 29
25.	Franklin Academy, Malone,	88	146 44
119.	Franklin Academy and Union School, Prattsburgh, ...	31	83 92
221.	Friendship Academy,	9	
54.	Fulton Union School,	58	138 22
207.	Geddes Union School,	12	
239.	Genesee Valley Seminary and Union School,	5	
67.	Genesee Wesleyan Seminary,	51	
42.	Geneva Classical and Union School,	66	52 65
170.	Gilbertsville Academy,	20	24 68
46.	Glens Falls Academy,	63	55 94
62.	Gloversville Union School,	52	
55.	Gouverneur Wesleyan Seminary,	57	85 56
154.	Gowanda Union School,	23	62 53
182.	Greene Union School,	18	3 29
158.	Greenville Academy,	22	
117.	Greenwich Union School,	33	24 68
49.	Griffith Institute and Union School,	60	66 64
197.	Groton Union School,	14	11 52
67.	Hamburgh Union School,	51	42 78
154.	Hancock Union School,	23	23 04
82.	Hartwick Seminary,	46	157 96
18.	Haverling Union School, Bath,	114	180 17
186.	Herkimer Union School,	17	13 16
113.	Holland Patent Union School,	34	49 36
221.	Holley Union School,	9	
104.	Homer Union School,	36	22 21
110.	Hoosick Falls Union School,	35	
47.	Hornell Free Academy,	61	98 73
137.	Horseheads Union School,	26	
137.	Houghton Seminary, Clinton,	26	14 81
236.	Hudson Academy,	6	11 52
137.	Hudson High School,	26	37 84
49.	Huntington Union School,	60	30 44
36.	Ilion Union School,	73	119 29
5.	Ithaca High School,	215	263 27
41.	Ives Seminary, Antwerp,	67	6 58
9.	Jamestown Union School and Collegiate Institute, ...	153	160 43
59.	Johnstown Union School,	54	88 85

142. Jordan (Free) Academy,.....	25	19 74
251. Keeseville Union School,.....	2	—
217. Kingsboro Union School,.....	10	—
18. Kingston Free Academy,.....	114	124 23
113. Lansingburgh Academy,.....	34	32 91
102. Lawrenceville Academy,.....	37	—
200. Leavenworth Institute and Union School,.....	13	—
211. Leonardsville Union School,.....	11	—
154. Le Roy Academic Institute,.....	23	52 65
193. Limestone Union School,.....	15	—
202. Lisle Union School,.....	13	3 29
25. Little Falls Union School,.....	88	126 70
236. Liverpool Union School,.....	6	—
8. Lockport Union School,.....	161	116 00
110. Lowville Academy,.....	35	44 43
51. Lyons Union School,.....	59	75 69
124. Macedon Academy,.....	29	16 45
251. Madison Union School,.....	2	—
248. McGrawville Union School,.....	3	—
170. Manlius Union School,.....	20	9 87
186. Marathon Union School,.....	17	—
124. Marion Collegiate Institute,.....	29	41 14
251. Marshall Seminary of Easton,.....	2	—
162. Massena Union School,.....	21	8 23
186. Mayville Union School,.....	17	3 29
162. Mechanicville Academy,.....	21	—
23. Medina Free Academy,.....	92	93 79
51. Mexico Academy,.....	59	59 23
129. Middleburgh Union School,.....	28	23 04
244. Middlebury Academy,.....	4	—
170. Montgomery Academy,.....	20	13 16
78. Moravia Union School,.....	47	64 17
162. Morris Union School,.....	21	23 04
162. Mount Morris Union School,.....	21	3 29
82. Munro Collegiate Institute, Elbridge,.....	46	41 14
142. Naples Union School,.....	25	13 16
90. Newark Union School and Academy,.....	43	45 25
158. New Berlin Union School,.....	22	36 20
211. New Lots Union School,.....	11	24 68
200. New Paltz Academy,.....	13	39 49
158. New Rochelle Union School,.....	22	—
239. Nichols Union School,.....	5	3 29
248. North Tarrytown Union School,.....	3	—
248. North Tonawanda Union School,.....	3	3 29
31. Norwich Union School,.....	79	37 84
78. Nunda Union School,.....	47	18 10
17. Ogdensburg Free Academy,.....	116	62 53
58. Olean Union School,.....	55	77 33
62. Oneonta Union School,.....	52	64 17
129. Onondaga Academy,.....	28	—
25. Oswego High School,.....	88	29 62
217. Ovid Union School,.....	10	—
16. Owego (Free) Academy,.....	120	172 77
113. Oxford Academy,.....	34	54 30
24. Packer Collegiate Institute, Brooklyn,.....	89	—
186. Painted Post Union School,.....	17	—
231. Palatine Bridge Union School,.....	7	3 29
38. Palmyra Classical Union School,.....	70	220 49
92. Parker Union School,.....	42	31 26
40. Penn Yan Academy,.....	69	87 21
82. Perry Union School,.....	46	125 05
142. Phelps Union School,.....	25	9 87
45. Phoenix Union School,.....	64	70 75

62.	Pike Seminary,.....	52	37 85
75.	Plattsburgh High School,.....	48	52 65
137.	Pompey Academy,.....	26	13 16
92.	Port Byron Free School and Academy,.....	42	59 24
182.	Port Henry Union School,.....	18	3 29
33.	Port Jervis Union School,.....	75	115 18
221.	Portville Union School,.....	9	
35.	Poughkeepsie High School,.....	74	82 27
75.	Pulaski Academy,.....	48	100 37
244.	Putnam Union School,.....	4	6 58
197.	Red Creek Union Seminary,.....	14	9 87
251.	Rhinebeck Union School,.....	2	
244.	Rochester Female Academy,.....	4	
4.	Rochester Free Academy,.....	296	
21.	Rome (Free) Academy,.....	101	155 49
211.	Rushford Union School,.....	11	
193.	Rushville Union School,.....	15	9 87
178.	Salamanca Union School,.....	19	13 16
129.	Sandy Creek Union School,.....	28	49 36
98.	Sandy Hill Union School,.....	39	47 72
42.	Saratoga Springs Union School,.....	66	16 46
192.	Sauquoit Academy,.....	16	
30.	Schenectady Union Classical Institute,.....	83	
124.	Schenevus Union School,.....	29	46 07
170.	Schoharie Union School,.....	20	11 52
149.	Schuylerville Union School,.....	24	46 07
29.	Seneca Falls (Free) Academy, ..	85	139 86
142.	Seymour Smith Academy, Pine Plains,.....	25	74 04
186.	Sherburne Union School, ..	17	18 10
104.	Sherman Academy, Moriah,.....	36	
158.	Sherman Union School,.....	22	41 14
211.	Silver Creek Union School,.....	11	14 81
149.	Sinclairville Union School, ..	24	16 46
78.	Skaneateles Union School,.....	47	64 99
211.	Smithville Union School,.....	11	3 29
74.	Sodus Academy, ..	49	3 29
134.	Spencer Union School,.....	27	64 17
124.	Stamford Seminary,.....	29	9 87
88.	Starkey Seminary, ..	44	36 20
2.	Syracuse High School,.....	496	
118.	Ten Broeck (Free) Academy, Franklinville,.....	32	34 55
197.	Tonawanda Union School, ..	14	
197.	Troy Academy, ..	14	14 81
170.	Troy Female Seminary, ..	20	
7.	Troy High School, ..	165	82 27
149.	Trumansburgh Union School,.....	24	3 29
170.	Ulster Free Academy,.....	20	
137.	Unadilla Academy,.....	26	37 85
162.	Union Academy of Belleville,.....	21	26 33
14.	Utica Free Academy,.....	128	258 33
217.	Vernon Union School,.....	10	6 58
22.	Wallkill (Free) Academy,.....	94	
104.	Walton Union School,.....	36	60 06
119.	Walworth Academy,.....	31	
149.	Warsaw Union School,.....	24	46 90
202.	Warwick Institute,.....	13	13 16
202.	Washington Academy,.....	13	14 81
239.	Waterford Union School,.....	5	
142.	Waterloo Union School,.....	25	32 91
20.	Watertown High School,.....	108	
44.	Waterville Union School, ..	65	88 85
110.	Watkins Academic Union School,.....	35	9 87
87.	Waverly High School,.....	45	93 79

221. Webster Union School,.....	9	
67. Weedsport Union School,.....	51	67 46
129. Wellsville Union School, ...	28	88 03
231. Westchester Union School, No. 1,.....	7	
67. Westfield Union School,.....	51	106 95
193. West Hebron Union School,.....	15	26 33
244. Westport Union School,	4	
186. West Winfield Union School,	17	3 29
119. Whitehall Union School,.....	31	65 82
182. Whitney's Point Union School,.....	18	11 52
170. Wilson Union School.....	20	16 45
251. Windsor Union School.....	2	
162. Woodhull Union School	21	
123. Yates Union School, Chittenango,.....	30	6 58
		<hr/>
		\$10,000 00

GOVERNOR HILL AND THE REGENTS.

Governor Hill says in his message to the Legislature that the Board of Regents is a purely ornamental body; that membership in it is only a pleasant retreat for respectable gentlemen of literary tastes and that there is no reason for its official existence. He recommends that the Board of Regents be abolished and "its powers and duties be intrusted to other hands."

So radical a proposition calls for strong and convincing arguments in its support. That any department of our State government should be summarily abolished comes a little unexpectedly and our minds need to be prepared for it by the clearest reasoning. That the vital interests of education should be taken from the wise and safe control under which they have so long been placed and intrusted to other hands, naturally arouses apprehensions which will not easily be allayed.

But Governor Hill entirely omits to state his reasons for so sweeping a recommendation. He speaks, it is true, of saving to the State the annual expense of the maintenance of this Board; but, perhaps because it is composed of "respectable gentlemen of literary tastes" instead of politicians, the impression has widely prevailed that the affairs of this board were very economically administered, and now it turns out that the *expenses* of the Board of Regents are only \$364.39 a year, as reported at the recent annual meeting. Isn't this a pretty small reason to assign for so important a change?

But, although the Governor does not show any necessity for the change proposed, nor any public benefit to be derived from it, both the purpose and the effect of a distribution of the powers and duties of the Regents "to other hands" can be readily seen. The Board of Regents cannot be "worked" politically. Sweep away this non-political board and create in its place three or four fat offices to be filled with men selected by *the Governor*. Let them and all their subordinates hold office by a political tenure. Then you will have other hands to which the powers and duties of the Regents can be "intrusted" in such a way as to yield a political advantage. But what will be the effect upon the educational interests thus transferred? Does any one suppose that they will be promoted? What

will be the effect upon "expenses?" Does any one think that they will be reduced?

The Board of Regents is called a purely ornamental body. Is this correct? Among its duties are the following:

(1) The Regents are trustees of the State Library, having control of its expenditures, selection of its books and appointment of its officers.

(2) The Regents are trustees of the State Museum of Natural History, appointing curators and controlling expenditures. They are charged with the duty of providing for investigation in fields of economic as well as theoretical geology, botany, entomology, etc., with reference to their bearing upon agriculture, commerce and education; and the publications, issued from time to time, giving the results of these investigations have not only conferred practical benefit upon these interests, but also reflected great honor upon the State.

(3) The duties of the Regents in fostering the interests of education are too numerous and diverse to admit of a full recapitulation here. Their supervision is such as to stimulate and encourage every grade of educational work from the highest to the lowest, while it leaves unimpaired the freedom of each separate institution. Not to speak of their relations to the training classes, the colleges and the professional schools, we note that the Regents' examinations have had a most salutary influence upon educational work throughout the State. The best teachers everywhere seek to have their work and that of their pupils judged by disinterested parties. This is regularly done by the Regents' examinations. The Regents, in a general way, prescribe what classes in each branch of study should accomplish. If pupils succeed, they secure certain advantages themselves and reflect great credit upon their teachers; if they fail, neglect and inefficiency are revealed. Does anyone doubt that in the presence of such encouragement, the average teacher will do better? Under the frequent exposure of these examinations, will not incompetent teachers be eliminated and will not the most faithful and successful teachers be discovered and recompensed? Nothing was more vigorously and unanimously insisted upon in the discussion of this subject at the late meeting of the Principals' Association than that, under the tests afforded by these examinations, teachers who do thorough and honest work succeed, while those who are superficial and attempt to cram their classes, fail. It is the testimony of principals and school officers all over the State that the effect of these examinations is to prevent pupils from dropping important studies before they have gained a proper mastery of them; to fire their youthful ambition and guide their efforts for improvement; to fix their standards of excellence and teach them the great life-lessons of thoroughness and perseverance. Reports and statistics show that the schools subject to the visitation of the Regents have become better organized and are doing more and better work than before these examinations were introduced.

Our space will not permit us to discuss this subject, nor to set forth in detail the advantages of the Regents' supervision of our secondary education. But enough has been said to show that they

have very important interests committed to them which should never be drawn into the arena of politics.

No, Governor Hill; with all deference and loyalty, we beg that you will not abolish this *ornamental* body. It is an ornament which the State has been pleased to wear for one hundred years. It has brought to her great credit and is associated with her most cherished interests. She would part with it only with the deepest regret and reluctance.

Henry Norman Hudson, the well-known Shakespearian editor and commentator, died in Cambridge, Mass., January 16th, from exhaustion following a slight surgical operation. Mr. Hudson was born at Cornwall, Vt., January 28th, 1814. His youth embodied the experience of so many famous men, and he was nearly 27 before he had worked his way through college. His public work on Shakespeare extends over a period of forty years from his first lectures at Huntsville, Ala., where he taught in 1841, till the publication of his Harvard Shakespeare a few years ago. His "Life, Art and Characters of Shakespeare" is considered by many the most valuable contribution to Shakespearian literature ever made. His English, once read, is never forgotten.

We make a brief extract from a personal letter written us just after his death by a Boston gentleman:

"Mr. Hudson's death was very sudden. His loss is a great one to the community, and it will be realized as time goes on. He has been a constant visitor here for the last ten or fifteen years, and in all our intercourse there have always been the most cordial and intimate relations. He has been a firm friend, reliable in every particular, and a conscientious worker,—a great lover of sincerity and truth, and a fierce hater of shams. His commentaries on Shakespeare and Wordsworth are fit companions of his great models. His simple, terse and vigorous language is almost unparalleled."

Died in Waterville, N. Y., of pneumonia following typhoid fever, Fred Norman Wright, principal of the Union School in that place.

Mr. Wright was born at Alexander, Genesee County, October 8th, 1853, prepared for college at Binghamton, and graduated from Yale in 1876, standing sixteenth in a class of one hundred and twenty-five. After graduation, he taught the Jordan Union School for seven years, bringing it to a high degree of efficiency and establishing among patrons and teachers an enviable reputation. Rejecting various offers at other schools for reasons that did him the highest credit, he at length accepted the principalship of the Waterville schools in 1883.

Our last glimpse of Mr. Wright was from the diligence top, between Chamonix and Geneva, one cloudy day in August, 1884. He is associated with all that is most delightful in a Swiss ramble, with the dusty trail to St. Nicklaus, with the glories of the Gorner Grat and the beauties of the Vernayez route, and the memory of him makes the remembrance of every spot more delightful. He was a man of singularly happy make-up, in whom different qualities, which you noticed as distinguishing characteristics in other men, so blended

and harmonized that in him they seemed but parts of a symmetric whole, and the man, rather than the qualities, attracted attention. He was a splendid athlete and a leader in sports, a pleasant singer, a fine scholar, a man of rare but unobtrusive executive talent. But strength, voice, learning, and organizing power were all subservient to manhood. The main impression left in the mind is that of symmetry. With a school boy's heart in every hour of recreation or vacation frolic, he had a man's serious purposes so steady and consistent that they needed no expression in words; you felt them. He was a loving friend, a dutiful son, a model teacher, a living exemplification of Emerson's words, "It is not so much matter what subject you study as with what teacher you study it."

We subjoin a tribute from Principal Cutting, whom he succeeded at Waterville.

"His death occasioned in this section of New York, as elsewhere, general surprise as well as regret; for Mr. Wright, from his college days, where he excelled on the campus as well as in the class room, was a man of perfect physique, strong, agile and evenly developed; and he, if any one, seemed destined to a long life. Though only about thirty years of age, he had already taken high rank among the educators of the State; for, without display of methods, he possessed clear-headed judgment, a tact that showed itself in instruction as well as discipline, a pronounced individuality, and withal, a personal magnetism that has always made him a leader since he was captain of his fellows in the football games at Yale.

"He was one of the few "born teachers." He was a keen observer of nature, as well as men, and an ardent lover of scenery and travel. Each year, as he rounded out a successful season of school work, he traveled. One year in the far west, the next in Europe, always to impart to his next year's work a freshness and vigor of intellect as well as a physical buoyancy by which he wonderfully inspired the young men and women under his care. Taking charge of the Waterville Academy in a period of prosperity, he carried it to a still higher degree of reputation, until it is one of the strongest schools of Oneida county and central New York, estimated by scholarship, numbers or general influence.

"Strong physically, strong mentally, Principal Wright was well-nigh the ideal teacher; for he was strongest in graces of character that in church, Sunday School, and in social organizations, impressed themselves upon all who met him. Brilliant, scholarly, devoted to his profession, loved as an elder brother by large circles of pupils, firmly knit into the warp and woof of church and village life, it is hard from a human view-point to become reconciled to his death.

"The fragrance of an earnest, cultured, consecrated life will always be associated with the name of Mr. Wright. Not only two villages, hundreds of pupils, a wide circle of relatives mourn his death; but his loss will be keenly felt by the associated principals of the State of New York, to whom his life, his example and his memory, will ever be an inspiration."

NOTES.

ADDRESS ALL COMMUNICATIONS TO THE ACADEMY, *George A. Bacon, Publisher, Syracuse, N. Y.*

THE ACADEMY desires to be informed of tendencies in any special location adverse to secondary education by general taxation.

Principal A. M. Wright, of Moravia, has been invited by the Waterville Board of Education to fill the place made vacant by his brother's death.

The contents of the present number are of interest primarily to the academic teachers of this State. In succeeding issues, the matter presented will cover a broader field, and include a wider range.

Auburn is to have a new High School building. The report of the committee presents some interesting figures relative to the growth of the High School, which has increased 110 per cent in eleven years. Present number of pupils, 307.

A question regarding the decadence of the study of Greek having arisen in the recent Conference, we propose at our earliest convenience to make a thorough canvass of the subject in leading schools and to publish the results, for the information of our patrons.

Principals receiving this number of THE ACADEMY will confer a favor by mailing to the publisher catalogues of their schools, reports, courses of study, or any literature calculated to throw light on special departments or methods of teaching. It is our purpose to collect and disseminate information revealing the tendencies of education and the prominence given to various studies. Cordial co-operation is solicited.

At the meeting of the Associated Principals during the holidays, Dr. John E. Bradley, of Albany, Principal Fox Holden, of Plattsburg, and Principal Charles R. Larkins, of Fayetteville, were appointed a committee to request the Regents to abolish the ordinance requiring a committee of supervision to be present during the examinations. We are happy to report that they have been entirely successful, and in future, no committee will be required in schools in which two teachers are present during the entire examination.

If you believe in the object for which this journal is started, the mutual improvement of higher teachers and the advancement of secondary education in all departments, you may help the cause: First, by subscribing to THE ACADEMY yourself and inducing your friends to do the same; Secondly, by sending to it at all times such news as will be of interest to its readers; Thirdly, by asking questions regarding the things that trouble you and telling your own experience where difficulties have been successfully met, or describing the means by which you have succeeded. Teachers' experience meetings are always profitable, provided the experiences are real, not ideal, and are truthfully told, without concealment or reservation.

When ready for press we received a very interesting letter from Principal Cheney, of Kingston, chairman of the committee on

increased Regents' appropriation. Before this meets the eye of the reader, a bill, drawn by one of the ablest lawyers in the State, and embodying the recommendations of the committee, will be presented to the legislature. Mr. Cheney reports that he has received hearty co-operation from the principals of academies throughout the State, and that they, on the other hand, have been most kindly received by their representatives at Albany. The prospects of the measure are bright, but we should remember the old adage, "there's many a slip, etc.," and not relax our efforts until the matter is fairly accomplished. Many thanks are due to Mr. Cheney and his efficient committee for their enthusiasm and systematic work.

Professor Comfort, of Syracuse University, in the *Standard* of January 18th, makes a suggestion of interest to all New York teachers, namely to have the Superintendent of Public Instruction "elected by the Board of Regents. The term of office might be fixed at five years, the incumbent to be eligible to re-election at the will of the board. Among the most manifest advantages of this method would be these:

1. The office of Superintendent would be permanently removed from the sphere of partisan politics.
2. A unification would take place in the supervision of the public educational interests of the state.
3. Unity, consistency, and harmony would be introduced into the administration of this important office.
4. The responsibility for the selection and election of the superintendent, which is now divided between all the members of the legislature, itself a short-lived body, would be felt to be personal by the nineteen members of the Board of Regents, itself a permanent body.

"The present legislature could do perhaps no more valuable work for the state than to make this change before the new superintendent is elected, and thus remove this office permanently from the sphere of partisan politics.

"There is not a little misapprehension as to the functions of the Board of Regents and the manner in which they have been performed. One year ago this body celebrated the first centennial of its existence. Not all of the work which was contemplated in the original act ordaining this Board has been found possible. The state of New York has not founded an organic university for it to superintend. But all of the work that has been committed to the Board has been done promptly and well. Through its well-directed efforts much has been accomplished in elevating the system of public education of the state to its present comparatively high rank of efficiency.

"The Board of Regents also has charge of the State Library at Albany and of the State Museum of Natural History, both leading institutions of their grade in this country. It has also charge of the state survey, and of the fixing of the state boundary, and has joint oversight with the Superintendent of Public Instruction of the Normal schools of the state.

"If additional functions should be given to it, as by committing to it the appointment of the Superintendent of Public Instruction and consequently the entire supervision of the system of public instruction in the state, there can be no doubt that these new functions will be performed equally well with others with which the Board has heretofore been endowed."

We are informed by Prof. Comfort that since the above was written, bills have been drafted embodying these recommendations, and that these bills will be presented at an early date in both the Senate and Assembly at Albany.

Having made arrangements with one of the largest and best equipped houses in the State, we are prepared to offer estimates for all kinds of book and job printing from a business card to a quarto volume. We shall make a specialty of catalogues, programmes and examination papers. Samples sent on inquiry, and prices guaranteed lower than for the same grade of work elsewhere.

Address THE ACADEMY, *Syracuse, N. Y.*

ANSWERS TO CORRESPONDENTS.

I have a class of young pupils about finishing their elementary work in Latin, but hardly able yet to grapple with Cæsar or any other classic Latin author. Is there not some work suited to their needs which I can give them for a single term? T. J. W.

Bennett's Easy Latin Stories, published by John Allyn, of Boston, is an excellent little compilation for young pupils, which might serve your turn. It is easy, interesting, and meets to a large extent the difficulty to which you refer.

Is there any way in which a teacher can be sure of the correct usage in the matter of punctuation? There is such a diversity in practice that I am constantly in doubt. E. B. M.

There is a standard treatise on Punctuation by John Wilson, published by Potter & Ainsworth, of New York, exhaustive in treatment and with a variety of illustrations. The book has this advantage, that in all the diversities of usage the man who follows it can never be counted *wrong*.

The first number of THE ACADEMY comes to you with the most unfortunate of introductions, a need of apology. The manager is entirely without experience in this kind of work, and this number is issued at the semi-annual crisis of his school duties, in the midst of examinations, promotions, and all the thousand details incident to the admission of an entering class and the reorganization of work for the second half of the school year. Its errors and deficiencies he will earnestly endeavor to atone for in subsequent numbers. Meanwhile he asks your aid in suggestions and contributions by which it may be more mutually helpful in the future. In the March number we propose to give a paper on English composition, by a High School principal, and the first of a series of articles on "Famous Schools" by the editor. Topics for discussion at any time will be gladly accepted and will receive full consideration.

Having made special arrangements, we advertise to furnish THE ACADEMY and the following periodicals at reduced rates, if paid in advance:

Harper's Monthly.....	\$4.00	regular price, \$4.00
" Bazaar.....	4.00	" " 4.00
" Weekly.....	4.00	" " 4.00
Atlantic Monthly.....	4.00	" " 4.00
Century.....	4.25	" " 4.00
St. Nicholas.....	3.25	" " 3.00
Scientific American.....	3.50	" " 3.20
Independent.....	3.50	" " 3.00
Christian Union.....	3.25	" " 3.00
N. E. Journal of Education....	2.75	" " 2.50
Popular Science Monthly.....	5.00	" " 5.00
North American Review.....	5.00	" " 5.00

To any principal sending two names and two dollars in cash before March 1st, we will send THE ACADEMY free for one year.

A NEW PUBLISHING HOUSE!

The following books formerly issued by GINN, HEATH & CO., have been purchased by D. C. HEATH & CO., 3 Tremont Place, Boston, to whom orders for the same may be addressed. Orders may also be sent, for the present, to GINN & CO., 743 Broadway, N. Y., and 180 Wabash Avenue, Chicago:—

<i>Sheldon's Short German Grammar</i>, \$	.60
<i>Deutsch's Select German Reader</i> , .	.90
<i>Boisen's Preparatory German</i>	
<i>Prose</i> ,	1.00
<i>Hodge's Course in Scientific German</i> ,	1.00
<i>Grimm's Kinder- und Hausmärchen</i>	.75
<i>Ybarra's Practical Spanish Method</i>	1.20
<i>Mitchell's Hebrew Lessons</i> ,	1.80
<i>Shaler's First Book in Geology</i> , .	1.00
<i>Teacher's Edition of Geology</i> , . .	1.00
<i>Remsen's Organic Chemistry</i> , . .	1.20
<i>Shepard's Elements of Chemistry</i> , .	1.12
<i>Hall's Method of Teaching and Studying History</i> ,	1.40
<i>Pestalozzi's Leonard and Gertrude</i> , .	.75
<i>Rousseau's Emile</i>, . . . . .	.75
<i>Sheldon's General History</i> ,	1.60
<i>Clark's How to Find the Stars</i> , . .	.20

<i>Gustafson's Foundation of Death.</i>	
<i>A Study of the Drink Question</i>	2.00
<i>How to Use Wood-Working Tools</i> , .50	
Guides for Science Teaching:	
I. <i>Hyatt's About Fables</i>, . . . .	.10
II. <i>Goodale's Concerning a Few Common Plants</i>, . . . .	.10
III. <i>Hyatt's Commercial and other Sponges</i>, . . . .	.20
IV. <i>Agassiz's First Lesson in Natural History</i>, . . . .	.25
V. <i>Hyatt's Corals and Echinoderms</i>, . . . . .	.20
VI. <i>Hyatt's Mollusca</i>, . . . .	.25
VII. <i>Hyatt's Worms and Crustacea</i>, . . . . .	.25
XII. <i>Crosby's Common Minerals</i>	.25
XIII. <i>Richard's First Lessons in Minerals</i>, . . . . .	.10

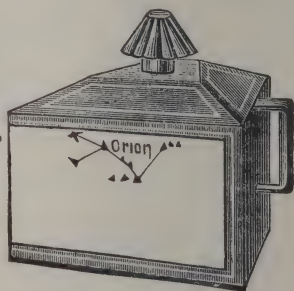
WE HAVE ALSO PURCHASED OF LOCKWOOD, BROOKS & CO.,

Dr. James Freeman Clark's

ASTRONOMICAL LANTERN.

The former price of the lantern was \$6.00; we now offer it, in improved form, with seventeen slides and a copy of "How to Find the Stars," for \$4.50.

A liberal discount to the trade.



We shall strive to give Booksellers and Schools no opportunity to complain that we are not prompt, accurate and obliging.

Suggestions from the trade will always be most cordially welcomed, and all favors duly reciprocated.

D. C. HEATH & CO., Publishers,

3 TREMONT PLACE, BOSTON, MASS.

ACADEMIC ALGEBRA,

— PREPARED BY —

WEBSTER WELLS, S. B.,

Professor of Mathematics in Massachusetts Institute of Technology.

There has seemed to be an urgent demand for a preparatory book that should be elementary in its character, and yet sufficiently *complete* for any

HIGH SCHOOL OR ACADEMY,

and that it should be arranged by a

PRACTICAL TEACHER OF THE SUBJECT.

It will be found especially strong in those essential features of Algebra which must enter into all the student's future work, and in which so many other texts have been deficient.

WELLS' UNIVERSITY ALGEBRA

is used at HARVARD, CORNELL, PRINCETON, LAFAYETTE and about 100 other Colleges in the United States.

LEACH, SHEWELL & SANBORN,

PUBLISHERS,

87 Franklin St., Boston,

743 Broadway, New York.

THE ACADEMY:

A JOURNAL OF SECONDARY EDUCATION,

DEVOTED TO THE INTERESTS OF HIGH SCHOOLS, ACADEMIES AND ACADEMIC
DEPARTMENTS.

GEORGE A. BACON, . . . MANAGING EDITOR.

VOL. I.

MARCH, 1886.

NO. 2.

*THE EDUCATIONAL SYSTEM OF GERMANY.**

Mr. President, Gentlemen of the Association, and Ladies and Gentlemen:

I come before you to-night with a serious consciousness that I stand before the representatives of the great cause of education in the great State of New York. We are met in the name of a common interest, and I hope we all realize that the development and encouragement of a true educational spirit can be brought about only by the hearty union and coöperation of all the educational forces of the State. It has sometimes happened that from want of such a union of interests the several grades of schools in a state have been obliged to labor under the disadvantages that always result from a variety of more or less adverse interests.

In the framing of the general Government the more immediate care of the great cause of education was, to use the phrase of the constitution, reserved to the States. The States in turn have left the immediate control of educational interests very largely to such wisdom, or such want of it, as there might be in the counties and towns. This system, if system it can properly be called, has doubtless had the advantage of developing a large sense of individual responsibility on the part of individual localities. But it has also been attended with some disadvantages. It has prevented, or at least tended

*An address delivered before the Annual Convention of the Association of Commissioners and Superintendents held at Ithaca, January 21, 1886, by Charles Kendall Adams, LL. D., President of Cornell University.

to prevent, that unity of purpose and unity of effect which have everywhere, I believe, been found favorable to the highest success.

In the State of New York such a unity, at least in the lower and intermediate schools, was early provided for. The Regents of the University and the Superintendent of Public Instruction are charged with the supervision and in some sense with the harmonious development of all these schools. Cornell University is a part of this general system. In the most important sense it is a State University. The Chancellor and the Superintendent are *ex officio* members of the Board of Trustees. By the terms of its charter it is bound forever to educate gratuitously the one whom you as Commissioners or your successors shall designate as the best scholar in each Assembly District. It admits without examination at the university such students as bring the diplomas of approved High Schools and Academies of the State. These provisions show that we have all the essential elements of an organic union. It seems to me that the educational interests of this great Commonwealth are to be earnestly congratulated on this fact; and, as the President of Cornell University, I desire to give you the assurance of my hearty support in any effort that may be made with the design of strengthening these bonds and furthering these ends.

What is it possible for a great school system, organized with great purposes and developed with great firmness and wisdom, to accomplish for a State and a nation? To this question we have in modern history one remarkable answer; and, as I am accustomed to think that we find the surest guide for the future in a careful study of the past, I shall ask you to give me an hour while I speak of the educational system of Germany.

At the beginning of this century, Germany was not a nation; it was only a people. The oppressions which the inhabitants had endured at the hands of tyrannical rulers had shaken their allegiance even to the fatherland. When the French Revolution broke out, therefore, Germany looked on with divided sympathies. The rulers were filled with horror; but the people were not without secret rejoicings that an effort had been made to break the yoke of oppression. This divided sympathy was the chief cause of that paralysis which seemed to seize the soldiers of Germany on the first approach of the armies of France. The troops who fled before the inferior forces of the French at Jena and at Auerstædt, and the troops who surrendered to inferior numbers the strongholds of Silesia, were none other than the grandsons of the heroes who had driven the French from the field at Rossbach, and the grandfathers of those who put to rout the same gallant standards in the murderous ravines at Gravelotte. There was no heart in the contest against Napoleon; for, pervading all classes of the people, there was an impression, vague and false indeed, but still not without strength, that the victories of Napoleon might break their chains, while his overthrow would be likely to rivet them stronger than ever. It is, there-

fore, not so strange as at the time it appeared, that Napoleon, wherever he went, crushed everything before him ; for the troops whose country he invaded seemed scarcely to require a decent excuse for surrendering at once their fortresses and their destinies into his hands. There are few more humiliating spectacles in modern history than the abject and helpless condition of Prussia when Frederick William the Third, at Tilset, having lost all, was obliged to receive a half of his kingdom and an army of forty thousand men at the hand of his contemptuous conqueror.

The means by which Prussia arose from the degradation of 1807 to the strength of 1870, are not to be explained by the discussion of a single subject. The nation was fortunate, even at the moment of despair, in having at command a number of great men. Scharnhorst and Gneisenau remodeled the army. Stein created a municipal system which secured excellent local government. Methods of general administration were fundamentally changed and reformed. But of all the many influences that were set to work in those busy years which followed the peace of Tilset, there was none other that equaled in importance and far-reaching results the reform in matters of education. Of the system that was developed from the labors of these years it is my purpose to speak to-day.

My theme is necessarily limited. I design to indicate the way in which the schools are organized, the methods by which they are controlled, the spirit in which they are supported and upheld. I have to deal not so much with the relations of teachers and pupils as with the relations of the schools and the people at large.

In the year 1794, at the age of thirty-two, Johann Gottlieb Fichte was called to a professorship at the University of Jena. He had already published several small works, among others one that was of so much philosophical merit as to be attributed to Kant. One of Fichte's earliest courses of lectures at Jena was given to an audience of students from all departments of the University, and was on the subject, "The Vocation of the Scholar." The course attracted not only the profound attention of the students and professors of the University, but also the admiration and approval of Schiller and Goethe. The design of Fichte in this course was to impress upon his hearers his sense of the part of the scholar in the welfare of the state. In the winter of 1807-8, this same author delivered a still more remarkable course of lectures at Berlin, which he called "*Reden an die Deutsche Nation*"—"Addresses to the German Nation." These addresses, published in April of 1808, were a powerful appeal for German unity on all political and social questions ; and no person can read them, even at this day, without being greatly impressed with the solemn responsibility under which Fichte felt that he was speaking. The object of the course was an elaborate and systematic enquiry whether there existed any efficient and comprehensive remedy for the evils with which Germany was then afflicted. And the lecturer found the remedy where Turgot, long before in France, had looked for deliverance from the selfishness and abuses of the old *régime*, namely, in a grand system of a national education. He planted himself firmly on this ground : Education

as hitherto conducted by the church has aimed only at securing for men happiness in another life ; this is not enough, inasmuch as men need also to be taught how to bear themselves in the present life so as to do their duty to the State, to others, and to themselves. He declares that he is sure that a system of national education will work so powerfully upon the people of the nation that in a few years they will be completely changed ; and he explains at great length what should be the nature of this system, dwelling largely upon the importance of instilling a love of duty for its own sake rather than for reward. The method which should be adopted was that of Pestalozzi. Of the fourteen lectures, three are given to the exposition of this system, and of the manner in which it should be applied. In order that we may judge of the solemn weight to be attached to Fichte's words, I quote a few sentences :

"A nation that is capable, if it were only in its highest representatives and leaders, of fixing its eyes firmly on the vision from the spiritual world, Independence, and is, like our early ancestors, possessed with the love of it, will assuredly prevail over a nation that, like the armies of Rome, is used only as the tool of foreign aggressiveness, and for the subjugation of independent nations ; for the reason that the former has everything to lose while the latter has only something to gain."

On the real condition of Prussia, and what ought to be done for permanent relief, he spoke as follows : "That we can no longer resist openly has been already assumed as evident ; it is universally admitted. Having, then, lost the first object of life, what remains for us to do ? Our constitutions will be made for us ; our treaties and the use of our military forces will be prescribed to us ; a code will be given us ; even the right of judicial trial and decision, and the exercise of it, will be at times taken away ; for the present we shall be relieved from all these cares. Education alone has been overlooked ; if we want an occupation, let us take to this. There we may expect to be left undisturbed. I hope,—perhaps I deceive myself, but, as it is only for this hope that I care to live, I cannot part with it,—I hope to convince some Germans, and bring them to see, that nothing but education can rescue us from all the miseries that overwhelm us. I count especially on our being made more disposed to observation and reflection by our need. Foreign nations have other comforts and resources ; it is not likely that they will give any attention to such a thought, supposing it to occur to them, or give any credit to it ; *on the contrary, I hope it will prove a rich source of amusement to the readers of their journals, if they ever learn that anyone promises such great results from education.*"

Having thus elaborated his doctrine, Fichte addresses himself to separate classes. He reproves business men for their contempt of culture. He warns thinkers and writers not to complain so much of the shallowness of the age ; "for," asks he, "what class is it that has educated this shallow generation ? The most evident cause of the dullness of the age is that it has read itself stupid in the books you have written." To the princes he commends his scheme of education. "Let your counselors consider whether they find it sufficient or whether they know anything better ; only let it be equally

thorough-going." Finally, he closes his series of addresses with an appeal to the young men before him in a passage that is almost pathetic from the solemnity of its words.

"On you it depends," says the orator, "whether you will be the end and the last of a race worthy of little respect, and likely to be despised, no doubt, even above its deserts by after time; in reading whose history, later generations, if, in the barbarism which will begin, there can be such a thing as a history, will be glad when the end of them arrives, and will recognize the justice of destiny; or whether you will be the beginning and germ of a new time, that shall be glorious beyond all your imaginations, and from which posterity will reckon the years of their welfare. Consider that you are the last in whose hands this great renovation is placed.

This course of lectures and the volume embodying them are of the highest importance in the history of German unity. It may be said that the book performed two important services. In the first place it was the beginning of an anti-Napoleonic revolution in Germany, perhaps I might say in Europe; and in the second place, what we have more to do with here, it inspired Stein with the ideas that were now to be embodied in the educational reform. In the administrative changes proposed by Stein, the Ministry of the Interior was divided into several departments; one of these was a Department of Education. To the head of this new branch of the government was called Wilhelm von Humboldt. To Stein we are to give the credit of the conception; but to Humboldt is due the credit of organizing and developing the system.

In the time of Frederick William I, the supervision of education had been entrusted to a General Directory. This had had charge of religious as well as of educational affairs. But in 1787 matters of an ecclesiastical nature were separated from those pertaining to the schools, and the latter were placed under the superintendence of a General Bureau of Education,—*Ober-Schulcollegium*. This bureau, or board, had no direct and official connection with the other branches of the government, and did its work in a drowsy and inefficient manner. It was the work of Stein, then, to break up this board and create an educational department in the office of home affairs, or, as we should say, Office of the Interior. The importance of this educational work was soon seen to be so considerable, that, in 1817, it was raised into an independent Ministerial Department. The two councilors associated with Humboldt were now increased in number to eight. The state was divided into provinces, and these provinces again into districts. Over each district was established a consistory for the supervision of public instruction. Such was the external organization, as then made, and as retained substantially to the present day.

But it is not so much to the new *organization* as to the *men* placed at its head, that Prussia owes her great educational reform. Humboldt united in himself a rare combination of ripe scholarship and organizing power. He had studied antiquity with F. A. Wolf, the prince of scholars in his day and the father of modern philology. The early part of his life, indeed, had been given up to an unusual quietism. He wrote to Wolf: "Every day the study of the Greeks

enchains me more. I may say with truth that no study, of the many studies I have taken up, has given me such satisfaction; and I may add that the very shadow of a wish to lead a life of business and activity has never so completely left me as since I have grown somewhat more familiar with antiquity." Humboldt then traveled much, became interested in languages, studied Basque, studied art at Rome, translated *Æschylus*, wrote and published original poetry, and then turned his attention to questions of finance and public economy. In the quiet comprehensiveness of his studies there was very much in Wilhelm von Humboldt like that which we find in Goethe. Perhaps, with the single exception of the great poet, Humboldt had a more absorbing belief in culture than any other man of his time.

But even this was not all. His great exemplar and inspirer had been not only the greatest philologist of his age, but also the greatest teacher and educationist of his time. While the greatest scholars of his day, like Boeckh and Bekker, acknowledged that they owed everything to his teaching, Wolf had been theorizing and writing up education, and had finally become perhaps the most eminent authority to whom the advocates of classical education can appeal. Formed by such teachers and surrounded by such influences, Humboldt took the portfolio of Education. This was in April, 1809; and from April, 1809, to April, 1810, Prussian history belongs to Wilhelm von Humboldt and his educational reform.

But before I proceed to describe the system established by Humboldt, I must call your attention to one other element of the problem. I refer to the altogether exceptional relations, in Germany, at this time, of literature and culture to politics. It is extraordinary that the very period of the great political disasters is the Golden Age of German literature. There had been, for reasons which it is not difficult to understand, but which I cannot stop to describe, a most extraordinary intellectual movement, a great outpouring of genius,—not as the inspiration of political liberty, but in a country and at a time when political liberty was unknown.

This fact is presented by Gustav Freytag in a passage quite worthy of quotation: "While thunder and storm," writes he, "roared so appallingly in France, and blew the foam of the approaching tide every year more wildly over the German land, the educated class hung with eye and heart on a small principality in the middle of Germany, where the great poets thought and sang as if in the profoundest peace, driving back dark presentiments with verse and prose. King and queen guillotined—Reineke Fuchs; Robespierre, with the Reign of Terror—Letters on the Aesthetical Education of Man; Battles of Lodi and Arcola—Wilhelm Meister, the Horen and the Xenien; Belgium annexed—Hermann and Dorothea; Switzerland and the States of the Church annexed—Wallenstein; the Left Bank annexed—the Natural Daughter and the Maid of Orleans; Occupation of Hanover—the Bride of Messina; Napoleon Emperor—William Tell." The striking antithesis here presented shows how completely literature and culture had been divorced from political life and influence. So complete and striking was this separation, that a writer of the time, Wilhelm Perthes, consoles himself for the

disasters of Germany by reflecting that they were likely to bring an end to "that fool's paradise, that is made up of nothing more substantial than literature."

But while there were some to take this superficial view, it was the great good fortune of the state to possess a group of men of whom Fichte, Schleiermacher, and Humboldt were the most distinguished representatives, and "in whom," as has well been said, "culture returns to politics the honor that has been done to it." In view of this fact alone can we understand the full force of Seeley's remark, that "In Humboldt and his great achievements of 1809 and 1810, meet and are reconciled the two views of life which found their most extreme representatives in Goethe and Stein." It was with such an end in view that Humboldt, with the assistance of Schleiermacher, Wolf, and Süvern, began his work.

This work was reared upon the solid basis of a fundamental law, from which I quote—a law promulgated in 1794 and modified somewhat in 1850:

"Schools and universities are state institutions, having for their object the instruction of youth in useful information and scientific knowledge."

"Such establishments are to be instituted only with the state's previous knowledge and consent."

"All public schools and public establishments of education are under the state's supervision, and must at all times submit themselves to its examinations and inspections."

"Whenever the appointment of teachers is not by virtue of the foundation or of a special privilege vested in certain persons or corporations, it belongs to the state."

"The teachers in the gymnasias and other higher schools have the character of state functionaries."

"For the education of the young, sufficient provision is to be made by means of public schools."

"Every one is free to impart instruction and to found and to conduct establishments of instruction when he has proved to the satisfaction of the higher state authorities that he has the moral, scientific, and technical qualifications requisite."

"All public and private establishments are under the supervision of authorities named by the state."

These provisions of the fundamental law (*Allgemeines Landrecht*) show that the central authority of the state has entire supervision of matters of education. We are not, however, to infer from this that Prussia shows a grasping and centralizing spirit; on the contrary, it has always been the policy of the government to make the administration of educational affairs as local as it possibly can, but at the same time it takes care that local authorities shall always be subordinate to those in general control. In this way it provides (to use the phrase of Matthew Arnold) "that education shall not be left to the chapter of accidents."

Now, the supreme excellence and efficiency of the Prussian system of education as reared by Humboldt and his colleagues, depend upon four elements. The temple rests upon four pillars, all of

which are essential to the stability of the structure, and all of which it is necessary that I should describe.

I. The organization of the controlling authorities.

I can think of nothing in our own government that so well conveys to the mind a notion of that organization as the organization of our federal courts.

As I have already said, the Ministry of Education consists of eight persons selected by the government to preside over educational affairs. Prussia was divided into eight provinces that would correspond with the circuits of our United States courts. In each of these eight provinces (usually in the chief town) was created what was known as the "Provincial School Board." These eight provinces were again subdivided into twenty-six districts, and in each district was to sit what is known as a "District Board." The state's relations with the secondary schools are through the provincial boards, while its relations with the primary schools are by means of the district boards. These boards consist of from five to eight persons each, a part of whom are commonly Roman Catholics, and a part Protestants. These boards are in constant communication with the Minister of Education at Berlin.

Besides all these, in 1810 the government established three Scientific Deputations; one at Berlin, one at Königsberg, and one at Breslau, to examine teachers for the secondary schools, and to advise the government in all important matters. You may judge of the sort of persons that Prussia called to these commissions when I name as members Wolf, Schleiermacher, Ancillon, Süvern, and Nicolovius;—Süvern and Nicolovius being members of the Ministry. To this day the schools of Prussia feel the benefits of the superior management thus early established. A few years later the "Scientific Deputations" were found to be insufficient, and they were superseded by seven bodies known as "Examination Commissioners." These seven were located in the seven university towns of Prussia. Each commission was made up of seven persons, representing the seven studies on which teachers are examined, viz.: Greek, Latin, history, mathematics, pedagogy, religion, natural science. These commissions, usually made up of members of the university faculties, give all certificates of fitness to teach. From persons having such certificates the boards appoint all teachers. University professors are appointed on the recommendation of the university senate by the Ministry of Education.

II. The second pillar on which the superstructure rests is the system of normal schools, or schools for the training of teachers.

The *art of teaching* has doubtless been brought to greater perfection in Germany than anywhere else in the world. This perfection has been reached, for the most part, through the influence of the normal schools,—schools, the object of which is, not to do work that can well be done in other schools, but, by a careful and systematic course of training, to teach how to teach. Teaching *as an art* may be said to have come into the world with Pestalozzi. Of this singular man it is hardly too much to say, as he said of himself, that he "turned quite around the car of education and set it in a new direction." In his day he was deemed an "unhandy, unpractical,

dreamy theorist," and yet, as has well been said, "he wrought as veritable a reform in matters of education as did Luther in matters of religion."

At first sight Pestalozzi must have seemed to have every disqualification for a teacher. He spoke, read, wrote, ciphered badly; as he himself says, he had "an unrivaled incapacity for governing;" he had no comprehensive and exact knowledge of either men or things, and he was never a teacher until he was fifty-two years of age. It was with such an outfit, as far as could be seen, that Pestalozzi, at the age of fifty-two, took charge of a school of eighty children in a tumble-down Ursuline convent at Stanz. Into a room twenty-four feet square were crowded "these eighty wretched children, noisy, dirty, diseased, ignorant, and with the manners and habits of barbarians." Such was Pestalozzi's school at Stanz. Surely an unpromising field and an unpromising prospect. And yet, to adopt the words of his biographer, "through the force of his all-conquering love, the nobility of his heart, the restless energy of his enthusiasm, his firm grasp of a few first principles, his eloquent exposition of them in words, his resolute manifestation of them in deeds, he stands forth among educational reformers as the man whose influence on education is wider, deeper, and more penetrating than that of all the rest,—the prophet and the sovereign of the domain in which he lived and labored."

And here is Pestalozzi's own picture of the manner in which he wrought his work,—a picture which embraces most perfectly the principles that were afterwards to be embodied in the German school system:

"I was obliged," he says, "unceasingly to be everything to my children. I was alone with them from morning till night. It was from my hand that they received whatever could be of service to their bodies and minds. All succor, all consolation, all instruction came to them immediately from myself. Their hands were in my hand, my eyes were fixed on theirs, my smiles encountered theirs, my soup was their soup, my drink was their drink. I had around me neither family, friends, nor servants; I had only them. I was with them when they were in health, by their side when they were ill. I slept in the midst of them. I was the last to go to bed, the first to arise in the morning. When we were in bed, I used to pray with them and talk to them till they went to sleep. They wished me to do so."

It was in this way, by his boundless love and devotion, that he first won their hearts and then inspired them with right desires. Here is the way in which this great but simple-hearted man describes his method: "I seldom rebuked them. When the children were perfectly still, so that you might hear a pin drop, I said to them, 'Don't you feel yourselves more reasonable and more happy now than when you are making a disorderly noise?' When they clung around my neck and called me their father, I would say, 'Children, could you deceive your father? Could you, after embracing me thus, do behind my back what you know I disapprove of?'"

These extracts are enough to show that in his system the car *was* turned completely around; that, instead of the old methods of force

and constraint, it was the *moral* sensibilities that were appealed to and made the motive of good acts.

The pertinence of all this to the subject before us is in the fact that Fichte had recommended at length the methods of Pestalozzi as the ones to be adopted in Prussia; and accordingly Humboldt sent for a pupil of the famous teacher to establish in Prussia a normal school for the training of teachers in the Pestalozzian method. C. A. Zeller was summoned to Königsberg in 1809 to found the first normal school. The new work was begun with the blessing of Pestalozzi, who, in the journal he had established, cheered fallen Prussia, and said to one of the ministers of education that he and his friends were the salt and leaven of the land, and would soon leaven the whole mass."

It is not to be supposed that the new method did not meet with obstacles. On the contrary the opposition was exceedingly strong; so strong, indeed, that at one time Zeller was on the point of giving up in despair. But just at this moment a fortunate circumstance occurred. The King, having heard of the complaints and difficulties, determined to visit the school. Accordingly one morning at eight o'clock, without giving any notice, the King, Queen Louisa, and the Educational Ministry walked into Zeller's school. It was no mere formal or common visit, for the King and Queen remained until one o'clock, examining everything with the utmost minuteness. As a result, the government was, once for all, brought over to the reformer's side. Normal schools on this model were multiplied rapidly, until, in 1846, the number of them in Prussia was no less than fifty.

III. The third pillar on which the system rests is the character of the secondary or intermediate schools—the *gymnasia* and *real-schulen*. The reform in these that was instituted by Humboldt was thorough and highly successful. His coadjutor in the ministry, Sövern, had this part of the work especially in charge; and it was to the details of this new organization that his friend and teacher, Wolf, was called. We are, therefore, to understand that it was through the influence of this prince of philologists that, in the new arrangement, the classics preserved the traditional position of honor. In this connection it is enough to say that the *gymnasia* were at this time established on the basis on which they have ever since rested. In 1863 the number of secondary schools ranking as *gymnasia* was two hundred and fifty-five, of which one hundred and seventy-two were classical schools, or *gymnasia* proper. Of their importance in the national development we learn from the simple fact that in these secondary schools, in 1865, the number of scholars in Prussia was 74,162; while in the same year, according to Matthew Arnold, the number in England in the same grade of schools was only 15,880.

IV. But it was on the fourth pillar of the new system that Humboldt left his deepest impress, namely, on the department of highest education.

Among all the losses that befell Prussia by the peace of Tilset, perhaps none was felt more bitterly than the loss of the University of Halle, where Wolf had made his fame. Immediately after the

blow had fallen, two of the professors went to Memel to lay before the King a proposal to establish a university at Berlin. On the 4th of September of this same year, 1807, an order came from the Cabinet declaring it to be one of the most important objects to compensate the State for the loss of Halle. But two universities, it was declared, were now left to Prussia, those at Königsberg and Frankfort-on-the-Oder. Königsberg was too remote, and Frankfort was too poor, to supply the place of Halle. It is a curious indication of the manner in which the Prussian government regarded the service of its teachers, that, in this very order of the Cabinet, assurances were given that arrangements would be made by which the services of the expelled professors from Halle would not be lost to the country.

While Stein was engaged upon his reforms, this subject did not pass beyond the period of discussion. But there is one phase of that discussion which is interesting as showing what they expected of the university, and as provoking in an American some important reflections. Was it desirable that a university should be planted in a great capital and close to the abode of the government? Some sort of tranquil retirement has been associated with the idea of a university, and the temptations of a great capital were likely to be dangerous to the morals of the students. We are told that, in view of this prospect, Stein was at first vehemently opposed to the establishment of the university at Berlin, but that, after listening to Wolf's arguments, he passed over to the other side of the question and supported the choice of Berlin with equal energy. Humboldt, and even his brother Alexander, for a time believed that "the shadow of the capital would blight the intellectual vitality alike of teachers and learners." And what was the argument of Wolf that finally prevailed in opposition to these views? It was that, in the judgment of the ministry, "the mischievous influence of the government on the university would be less considerable than the beneficial influence of the university on the government." In the report of Humboldt, made on May 12, 1809, the position is stated in these words: "What can be more desirable than a constant intercourse between the heads of science and the principal officials! How intellectually refreshing, thought-awakening, and naturally elevating, is such intercourse likely to prove to the latter!" And on the fiftieth anniversary of the founding of the University, it was declared that "this anticipation had been abundantly fulfilled."

On the 16th of August following Humboldt's report, an order of Cabinet was announced founding the University. The King set apart the royal palace of Prince Henry as its abode, and assigned for it an annual gift, from the first, of 150,000 thalers. Under the system I have endeavored to point out, it was, of course, the work of Humboldt and his fellow ministers to select the professors. He at once occupied himself in negotiations with men of learning in all parts of Germany. And what faculties were brought together! Fichte for philosophy; Schleiermacher, De Wette, and Marheineke for theology; Savigny and Schmalz for jurisprudence; Friedländer, Kohlrausch, Hufeland, and Reil for medicine; Niebuhr and Rüh-

for history; Wolf, Buttman, Boeckh, and Dindorf for antiquity; Tralles and Gauss for mathematics.

The University was opened at Michaelmas, 1810; and, in the following year, the first work published from the new University, the first volume of Niebuhr's Roman History, formed an epoch in modern historical research. This was followed by the works of Fichte, Savigny, Schleiermacher, Raumer, Hoffman, Boeckh, Hegel, Schelling, Ranke, and scores of others, forming a galaxy of names such as no other country or century can show. In view of such an array of genius, brought together at such a time, we are justified in saying that the founding of the University at Berlin was not the least memorable of the great works of that age of reforms. With such a beginning, it can hardly be considered strange that, within three-quarters of a century, it has grown to such power and influence that it may fairly be regarded as the foremost university in the world. From all nationalities, in both hemispheres, congregate annually not less than about four thousand students to receive instruction and inspiration from teachers whose fame is known wherever scholarship is respected and admired. Nor was the spirit shown in the founding of this University an exceptional one. As the King vacated his palace in Berlin for the University there, so in 1818, after Waterloo had given back to Germany the left bank of the Rhine, he consecrated the electoral palace at Bonn to the same noble use.

Such, then, was the system. But machinery without motive power is helpless. In Germany the propelling force was provided by general law. Every professional man, whether lawyer or clergyman or teacher, before entering upon the work of his profession, was obliged to pass an examination that presupposed a liberal education. No lawyer could collect a fee for advice or service unless he had previously received the training of a university. No physician could write a prescription until he had received the same liberal outfit. And, most important of all, no person could teach in a gymnasium, or swing a ferule in a district school, until he had first received the training of a professional teacher either in a university or in one of the state normal schools. It will be seen that here was the force that put life into the system,—that made the schools pulsate with all the potencies of national greatness.

Having studied the system, and the legal requirements that form the motive power, we are now in condition to inspect, with a little more care, the individual parts. Let us look especially at the normal schools, the secondary schools, and the universities. But while we examine each of these parts of the system, let us not forget its organic connection with others. The system is a means to an end. It is framed to accomplish a certain result. It is like an army made up of different divisions and corps; and we must keep in mind the fact that the best results are reached only when the respective parts reach their destination in such order as to coöperate perfectly with the others. It is in the massing of forces that a general shows his greatness or weakness. And so it may be said that the Prussian system of education reveals its true excellence, not so much in the character of any one part, as in the unity of the whole, and in the

perfection with which each part is fitted to do the particular work assigned it.

What we might call the fundamental idea of the Prussian system, what the German perhaps would call the *Begriff*, may be stated in this way: Whatever you want a man for, there is no way in which you can make so much of him or get so much out of him as by training him. Society needs everything that can be got out of its people. The state therefore should furnish the most systematic means of training for different purposes; and, secondly, it should make this training compulsory. In order to furnish the means of training it must provide the most skillful teachers. In order that training may be compulsory it must allow no person to practice a trade or a profession until he has been properly trained for the work. While in America we have always placed emphasis upon liberty in the choice of work, in Prussia emphasis is placed upon protection from the imposition of bad work.

But how are skillful teachers secured? The answer is, by making teaching a profession and by elevating it to the rank of an honorable one. With us teaching can hardly be said to be a profession. Some of the best teaching done in our secondary schools is by persons who are simply filling the chasm between their undergraduate and their professional studies. There is reason to believe that if all our teaching were equal to that done by this class of persons, some of it would be very much less faulty than it is. That is not saying that it would not still be poor. A Prussian looks upon such a system as ours much as we would look upon a custom that should drive students for two or three years into the practice of law, or medicine, or theology, under similar transient inducements. The Prussian method, on the contrary, will allow no man to teach until he has fitted himself for teaching as a profession. Nor is this a mere nominal condition. The teacher enters upon teaching for life. He is no more likely to abandon it for another profession than the physician is likely to abandon medicine. After he is once appointed to a place he cannot be removed but for cause. He has a house and garden furnished him as the church furnishes a rectory or parsonage; and when he dies or is disabled his family receives a pension for the support and protection of old age. Such is the career to which the teacher looks forward.

But how is he prepared for his work? This brings us to an examination of the normal schools.

In the first place it should be said that these are as strictly national institutions as are our academies at West Point and Annapolis. They strive to make teachers just as strictly as our military academy strives to make soldiers. Of these normal schools there are seven or eight in each province; and admission to them is secured just as at West Point, as the result of competitive examination. The examination is severe and searching. The number of applicants is always much greater than the number to be admitted; and competition at the entrance examination is very great. No person is admitted even to examination until he has produced a physician's certificate of health and of freedom from all chronic complaints. Every one is debarred who has a weak voice or any physical defect

or infirmity. These provisions make it certain that none but picked men shall become teachers in Prussia. Of applicants examined enough of those standing highest are admitted to fill the vacancies in the normal school. The period of residence in the school is never less than two years nor more than three. The branches pursued are chiefly a continuation of those previously studied at the primary and superior schools. Great attention is also paid to drawing, writing, and the natural sciences. Every teacher in a Prussian school must write a good hand, must be skillful in drawing, and must know enough to teach well the elements of botany and zoölogy. Besides these *all* students in the normal schools must learn the violin, the organ, and the piano. Mr. Kay relates that he heard three organs, three pianos, and a hundred violins in one normal school. As each teacher is to have a garden furnished him, he is taught to make good use of it, by careful instruction in gardening, horticulture, and floriculture. The age at which pupils are admitted to the normal schools is eighteen. The cadets, for such they may be called, are often sons of peasants; often persons who have been fitted to enter the normal school by the village minister, or by some other interested person. The students live in the college as a dormitory, and are supported chiefly by the state, as are our cadets at West Point. The only expenses of the students are for their clothing and the payment of about fifteen dollars a year. All else is borne by the state. Such, then, are the provisions by which Prussia strives to fit its teachers for their work.

At the final examinations students receive a diploma marked first, second, or third class, as the acquirements of the students justify. Only holders of diplomas of the first class are eligible to appointment at once. Students of the second and third grades are put on probation of one and two years respectively, after which they may be re-examined for a place in the first class. They sometimes return three or four times before they are successful.

Such was the provision made in 1810 by Humboldt. In 1820 it was still further determined that even those holding diplomas of the first class should subject themselves to one year's probation before they could be permanently employed. It is not absolutely essential that a person, to be a teacher, should pass through a normal school; but it is essential that such person pass an equivalent examination before the examining commission. As this is exceedingly difficult, it is, in fact, almost never accomplished. Without the diploma of the first class from a normal school, or a certificate of having passed an equivalent examination, then, no person in Prussia is allowed to teach. It is even made a misdemeanor to employ any other person.

There is one further provision that is worthy of note. It is, that, although the proper authorities of a district may select from those having the requisite requirements a teacher for their school, when he has once been installed, they cannot remove him. Such removal can be brought about only by the provincial board. The object of this provision is easily seen. The government says: The teacher has made a long study of pedagogy, and he has greater ability to judge of the art of teaching and managing scholars than those can

have who have had no such training. We will no more allow the people of a district on their whim to turn out a teacher whom we have educated, than we will allow a military company to turn out a captain. If it can be made to appear that there are good reasons why he should be turned out, those reasons must be presented to the provincial board, since they are so far removed as to be free from prejudice. Thus you see that the teacher not only has an excellent outfit, but in the exercise of his vocation he is practically independent.

I said that the teacher is furnished in each district with a house and garden. These are usually joined with the school building. Rather, perhaps, it should be said that the school-room is usually in the house of the teacher. The consequence of this provision is that the teacher is practically a permanent officer of the village or district, and is so situated as to have a vast influence on the life and development of all of his pupils. The affectionate and tender relations established between teacher and pupils in Prussia are the subject of constant remark by those who have inspected the workings of the common schools. It is in such schools, and by such teachers, that the Prussian children are taught. I think you will agree with me that it becomes us, in view of such facts, to be modest in what we have to say of our own primary schools.

Suppose that a boy is destined for one of the professions, say theology, law, medicine, or higher instruction. Between the age of eight and twelve he leaves the primary school and goes to a gymnasium, or to a *real-schule*. Institutions of this grade constitute the famous secondary schools of Prussia. As I have already intimated, the number of these schools in Prussia is nearly three hundred. Of these, about two-thirds are gymnasia, or classical schools, and one-third *real-schulen*, in which the study of Greek is not pursued.

In all of these schools the curriculum of study is the same, and is determined by the government,—that is to say, by the Educational Bureau, of which I have already spoken. The gymnasia are regarded as government schools, though the students are not supported by the government, as in the normal schools. The course of study embraces six classes, running from *sexta* to *prima*. The work of several of these classes requires two years,—*prima*, always two years. The length of the course in the gymnasium, therefore, is from eight to ten years,—say while the scholar is from nine to eighteen or nineteen years of age.

From what has been said of thoroughness in the outfit of teachers for the primary schools, we should expect to meet a similar adaptability of means to ends in the gymnasia. And we are not to be disappointed. The teachers are all teachers by profession. They are all appointed by the Educational Bureau of the Province, and from those who have passed the requisite examination.

These examinations ("*Die Prüfungen der Candidaten des höheren Schulamts*") are an important part of the great reform instituted by Humboldt. The rules for conducting the examinations have been modified slightly from time to time; but those now in force were adopted as early as 1831. The examinations are conducted

by the High Examining Commissioners of whom I have already spoken.

The candidate who presents himself for examination must first hand in a school certificate of fitness for the university, and then a certificate of three years' attendance at university lectures. Accompanying this must be a *curriculum vitæ*, written in Latin if the candidate is an applicant for a position in a gymnasium; in French if an applicant for a *real-schule*. The examination, if successful, results in a certificate conferring the right to teach,—*facultas docendi*; and this is conditional or unconditional,—*bedingte* or *unbedingte*. The "*bedingte facultas*" allows the holder to teach only the lower classes of the gymnasia and real-schools, while the "*unbedingte facultas*" confers the right to teach some one subject in *secunda* or *prima*. From the persons that have passed this examination the Provincial School Board selects the teachers in the gymnasium. Every teacher is required to know French and something of English, besides Latin. Teachers in the real-schools are not required to know Greek. The *Probejahr*, or year of probation, is insisted on in the gymnasia. These requirements show us that boys fitting for the university are taught by none except such as have, in the first place, received a liberal university education in addition to the preliminary education procured at the gymnasium; and have, in the second place, passed a special examination before the Examining Commission. Into the hands of such a corps of teachers, then, our boy of eight or ten falls when he enters the gymnasium.

We sometimes hear complaints that our scholars in America are kept at too hard work. Such complaints are doubtless sometimes well founded, but generally they are as ridiculous as they are unworthy of our physical and mental stamina. The students of the German gymnasia are kept in school in summer from 7 to 12 o'clock, in winter from 8 to 12, and during all seasons of the year from 2 to 4. The number of his exercises per week is never less than thirty, and, during half of the course, is thirty-five. These, it is true, are not all what we call "recitation work," but they are all work under the immediate direction of a teacher. The curriculum includes, besides the heavier studies, book-keeping, reading, penmanship, gymnastics, and music. The students in the hands of such teachers, then, have six lessons a day five days in the week, and five lessons on Saturday.

The results of this kind of work seldom fail to awaken astonishment in the American who visits the gymnasium. Of the various interesting things I saw in the German schools, there were two that surprised me more than all the others. The one was the performance of one of the oratorios of Handel, from beginning to end, by the scholars of one of the gymnasia of Leipzig. The choruses, rendered by two hundred voices from the gymnasium, in the very church where Bach had won his fame, seemed like a chorus of angels. The principal solos were rendered by a boy of thirteen, with a power, an accuracy, and a sweetness that brought tears to many an eye in that vast congregation. Not more than a month later, the boys of the same school put upon the stage the *Antigone* of Sophocles, in the original tongue. The other exhibition of skill and attainments to

which I allude, was at a gymnasium in Bonn, and was a discussion carried on by the scholars of *prima*, under the direction of Dr. Schopen, one of the teachers. From beginning to end the discussion was conducted in Latin, was carried on with fluency, and with such accuracy that very few corrections in the course of two hours were called for by the professor.

It is a matter of interest to us to note that final examinations for admission to the university are conducted, not at the university, but at the gymnasium. This custom is a result of much experimenting, extending over the whole period from 1812 to 1856. Schleiermacher was, from the first, in favor of having the examinations entirely with the gymnasia; but Humboldt favored taking them to the university. Experience, however, has proved conclusively to those in authority that the examinations are held with best results at the gymnasium; and there, since 1856, they have uniformly been conducted.

But the final examination is a genuine test of scholarship. The examining committee consists of the Directory of the gymnasium, the teachers of *prima*, one member of the Provincial School Board, and two members of the "Joint Patronage Commissary." The law provides that the examination shall be of the same severity as the ordinary work in *prima*; but one condition is noteworthy, *the examination is not to be on work that has been done in school*. The examinations are to be both by writing and oral. The written examination continues a week, and those who fail in it are excluded from the examination *viva voce*. The tests in Latin, German, and French are chiefly by means of extemporaneous compositions in those languages. The papers are marked either "insufficient," "sufficient," "good," or "excellent." At the end of the examination, the pupil is voted upon by ballot, and finally receives a diploma marked either "*reif*" or "*unreif*." The papers are all preserved; and an "unripe" student may appeal to the Highest Examining Authority, in which case the examination papers are sent up for inspection. The final examinations take place near the end of each semester; and the public occasion of the conferring of the diplomas is known, not as "Commencement," or "Exhibition," but as the "Solemnity."

The "scholar" is now ready to become a "student." The two words in Germany have very different significations. The scholar is kept under the severest discipline until it is believed his habits and tastes are fixed. The student, on the other hand, is regarded as having come to mature years, to years of discretion, as having completed his preliminary training; and, therefore, he is given what is, practically, absolute liberty. At the age of nineteen or twenty, then, he goes to the university. Here he finds the organization of the highest grade of schools substantially as it was fixed by Humboldt and his colleagues in 1810. There are four or five faculties: one of Philosophy, one of Law, one of Medicine, one of Protestant Theology, and sometimes, in addition, one of Catholic Theology.

In each of these faculties the instructors are divided into three grades: Ordinary Professors, Extraordinary Professors, and *Privat Dozenten*. These officers are always appointed by the Ministry of Education, on the recommendation of the university senate, the min-

istry selecting one from the three persons nominated by the senate. The Ordinary Professors constitute the Faculty, and each faculty has a dean or presiding officer, chosen from its own number. All the faculties acting together choose from their own number the *Rector Magnificus*, who, for one year, is President of the Senate, and official head of the university. The deans of all the faculties, together with the university judge, the rector, and the pro-rector (that is, the rector of the preceding year), constitute the university senate,—the board for the administration of all matters of general university interest. The university judge, always a member of the Faculty of Law, constitutes the court before whom all students accused of violating law are tried. The university has its jail (*carcer*), and its system of fines, and testimony is taken according to the rules of evidence.

The two characteristics which impress a foreigner most deeply on visiting or entering a German university, are the freedom of the professors and the freedom of the students,—what the Germans call *Lehrfreiheit* and *Lernfreiheit*. The freedom of the professors is almost absolute. Each is required to deliver one or two public lectures a week, but that is all. Beyond that he may lecture as little as he chooses or as much as he chooses, and on any subject he chooses. This freedom has its element of safety in the fact that for all instruction, except the public lectures already alluded to and perhaps a little very advanced private work, the student pays a fee that goes to the professor. If the professor nods too often, or reads lectures that have taken on too much of the smoke and veneration of age, the students desert him and his income is reduced. While, therefore, there is no *requirement*, there is every *inducement* to industry. A still further guarantee against dullness and indolence on the part of the professor is, that, close behind him, there is a vigorous corps of ambitious young teachers who enjoy the same liberties accorded to him, and who, therefore, are sure to draw away his students if his lectures cease to be of value. The system of *privat doctenten* is unquestionably one of the most important elements of university thoroughness and success. Some of the most careful observers regard it as the key to the whole excellence of the German university education.

A word in explanation of the system may not be out of place. It is this: If a student, at the time of completing his university studies, has shown superior excellence, and has manifested a desire to devote himself to university teaching as a profession, he receives what is called a *facultas docendi*. This is simply a privilege of lecturing in the university. When he has received this he may lecture on any conceivable subject. He receives no pay from the university. He must rely exclusively on his ability to draw students, and to get money from them in the way of fees, for his income. The university puts upon him this simple limitation: he is not allowed to sell his wares cheaper than the full professors sell theirs,—is not permitted to receive smaller fees than the others, the rates of which are determined by the university senate. The attendance at the lectures of the *privat doctenten* is usually small; sometimes it is limited to two or three persons; sometimes even courses are announced at which not a

single student appears. All these facts are constantly giving hints, of course, to the *docent*, as to what is wanted by the students. In general the lectures of a renowned professor are preferred. A *docent*, for example, would find it hard to get students in Physics in competition with Helmholtz, or in Philology in competition with Curtius. But, on the other hand, the *docent* offers some advantages. He can give more individual attention to his students. He is not yet completely removed from the student world. He goes to the old resorts with the students themselves. He eats with them, drinks with them, is, in short, in a condition to render such practical assistance to a student as a professor could not. In this manner the *docent* pushes himself on. If he does not succeed, his lot is like that of failure elsewhere; but as no students are obliged to hear him, the mischief falls chiefly upon himself. If, on the other hand, he is successful as an author and lecturer, as soon as his success is pronounced, he is likely to be called to a professorship either in his own or in some other university. In the position of *privat docent* the spurs of nearly all the great men now in professors' chairs in Germany have been earned. The system affords an admirable example of a thoroughly organized method of competition and of the survival of the fittest. Appointments to professorships are permanent, and removals never take place but for most flagrant reasons. Professors, therefore, feel secure in their seats, and exercise freedom of opinion with absolute and often startling independence. The universal maxim seems to be that intellectual integrity is the basis of all true development. Therefore, in Germany, what a professor thinks, that he is expected to say.

The number of courses of lectures given at the University of Berlin in each semester is about four hundred. In the first term of last year there were, in Theology, thirty-six courses; in Law, sixty-two; in Medicine, one hundred and ten; and in Philosophy, one hundred and seventy-five. During the year, then, no less than about eight hundred courses are offered at this one University, from which the student can freely make his choice.

But a very few moments remain to me for what I have to say of student life in Germany.

The German student is a person of a very different nature from the old-fashioned American student. I say the old-fashioned student, because I am convinced that a rapid transformation is taking place in student life in this country. The student of former days was simply a school-boy of a larger growth. But it is simple truth to say, and it is a great source of satisfaction to observe and to recognize the fact, that, in ten years, students in the University of Michigan have made a great advance in the direction of better order and a higher manhood. All sympathy for the old days of college pranks is coming to be recognized as a sympathy for barbarism; and it is safe to assert that we are fast leaving behind us the time when a student can be a rowdy without being a social outcast. I am persuaded that this change is the result very largely, if not entirely, of the recent advances that have been made in several of our larger universities, and especially in the University of Michigan, toward the liberties accorded to students in the universities of Germany. A

study of different institutions would probably reveal the fact that, in those colleges where the old methods have been rigorously adhered to, the improvement has been very slight; while the introduction of larger privileges of election has everywhere been followed by a more healthy and manly tone of earnestness and scholarship. The explanation of the fact is easy. While well regulated liberties encourage good order, too many restraints provoke lawlessness. Goethe, with that profound insight into human nature which was one of his most striking characteristics, put the explanation into the mouth of Wilhelm Meister: "In well adjusted and regulated homes," said he, "children have a feeling not unlike what I conceive rats and mice to have; they keep a sharp eye on all crevices and holes where they may come upon some forbidden dainty. They enjoy it also with a fearful stolen satisfaction which forms no small part of the happiness of childhood." And the characteristic so well described by Goethe is not confined to very young children. It is unquestionably true that even adult human nature experiences a delicious satisfaction in outwitting those who are believed to have imposed irksome and needless restraints. When monks were forbidden to look upon women, and nuns were forbidden to look upon men, monasteries and nunneries became what they were represented to be by the Italian literature of the fourteenth century. Men and boys will not be kept out of the water by being told that certain waters lead to Niagara. If it is not courage itself, it is something akin to courage, that leads great natures to dare that which is dangerous, and which accomplishes great results. Say to a group of boys, "That cliff yonder is dangerous, and you must not approach it," your young Napoleons and Cromwells and Clives and Luthers and Wesleys will probably be at the top of it the next morning before you are up. And society is in a wrong condition which condemns them as hopelessly lost because of their superabundance of human nature.

It is these considerations, doubtless, that afford the explanation of what has often been a puzzle. The saddest and most disheartening experience of a college professor is probably that which comes to him when he sees, as he sometimes does, full-grown and full-bearded men forgetting the avowed object of their university life, and devoting the full energies of their maturity to trivial pastimes and trickeries that are scarcely worthy of pupils of half their years. And yet, whenever this full-grown and full-bearded youth is separated from his fellows and interrogated, he is generally found to be a reasonable human being, and one free from vicious purposes, if not, indeed, inspired with correct ideals. But, what is equally important, it will also be found that he is chafing under restraints and requirements and restrictions and usages that are imposed upon men of his age in no other relation of life. It is a curious fact, that in this country, the most prominent characteristic of which is supposed to be freedom, the university student, up to within the last ten years, and, in many quarters, even up to the present time, has enjoyed less of freedom than the university student of any other country in the world. It is also worthy of note, that, in no other country, have the students, to such an extent, carried up into manhood the unworthy and mischievous trivialities of childhood. Reason, as well as the fruitful

experience of the last ten years, goes to show that these two facts will stand and fall together.

I have been led to these reflections by the sharp contrast between the German student at the university and the student in a similar position in America. The ages of the two are about the same. But the German is in every way taught to feel that he had ended his childhood and has begun his manhood. He is now free and is henceforth to work for nobody but himself. He is no longer to be marked for good or bad recitations, is no longer to be subjected to grading or surveillance of any kind. He feels himself a free man. He can select his studies, his professors, his hours; can hear lectures from eight in the morning to six at night, or, if he choose, he can hear absolutely none at all. He knows that there is no rector or dean or professor to trouble himself about him; to care whether he "cuts" regularly or not at all, whether he fights a duel every week or never, or even whether he goes to bed sober or drunk. All that is entirely his own affair. He knows that henceforth his destiny is in his own hands, and in his alone. What is the consequence? The *Primaner*, or, as the students generally call him, the *Fuchs*—what we should call the Freshman—is often wild. He is experiencing the first delicious sense of freedom. He has had ten years of hard work, during the last three or four of which he has worked up to his full capacity. He has been borne down to the water's edge. He has had scarcely a day that he could call his own. He now feels an inclination to let his mind lie fallow awhile. He is restless. He visits the lecture rooms of all the professors in the university. He annoys his landlady by giving up his room for other quarters. He has much of the veridancy of an old-fashioned freshman, added to something of the bravado of an old-fashioned sophomore. If, in addition to his mental outfit, he has a good deal of physical exuberance, he is likely to join a corps, or a *verbindungs*. He perhaps drinks heavily, and in that curious kind of sword practice not very correctly called a duel, gets his face scarred a few times by older and more skillful swordsmen.

But after a short period this spurt of folly generally wears away. If the student has the making of a man in him, he gradually abandons his excesses and settles down to hard work. It is said even that the roll of professors and *dozenten*, as well as of the eminent men in all the walks of life, shows a very large proportion of persons who were given to wild excesses during the first months of their university career.

But here again is a marked difference between the American student and the German. Our student, if he resorts to places of public amusement for his recreation, is unquestionably in real danger. He seems to have left behind him all sense of restraint when he crossed the threshold. But not so with the German. He is still in company with those whose character and conduct he respects. He has the same reasons for conducting himself properly that he has on the street or in polite society. He seldom forgets that his vocation is one of dignity. Students, therefore, are uniformly deferential toward one another. Every hour thousands of students are emptied from the lecture rooms into the narrow corridors of the University of Berlin, but the order is as perfect as that of a congregation passing

from a church. If one were to jostle another without an immediate and satisfactory apology, the act would be regarded as a gross infraction of that fine code of deference which universally prevails. They are not very scrupulous about dress; but they allow no personal familiarities or disparaging personal remarks. It is true that the most intimate friends, on meeting, embrace and kiss each other; but they do it in a very gentlemanly, or, perhaps I ought to say, in a very lady-like way.

But I must bring this discussion to a close. It remains only to add that the German system of education, at once the most carefully designed, the most comprehensive, and the most efficient the world has ever known, has borne fruits worthy of its intrinsic excellence. Within the present generation we have had abundant evidence of the way in which it developed the resources of the nation in all the manifold forms of literature, science, art, and action. On the one hand Germany has become the educational Mecca, toward which all those who seek the best that the world has to give must make their way; while, on the other, the fragments that seemed hopelessly scattered and separated have been brought together, and bound into a living organism that throbs with the pulsations of a vigorous political life. One of the princes who fleshed his sword at Waterloo, and saw his queen-mother die of broken heart, because Prussia seemed hopelessly crushed, lived not only to be crowned king of the most powerful nation of Europe, but also to be hailed as emperor of a united German people. And thus the most sanguine hopes of Fichte and Humboldt were more than fulfilled.

THE FIVE FLORIDAS.

JOEL DORMAN STEELE, PH. D.

A traveler soon discovers that the boundaries made by man often fail to coincide with those established by nature, whose divisions are rarely outlined with abrupt distinctness, but are shaded, one into another, by imperceptible degrees. Thus, in our geographies, we learn of but one Florida, whose extent is sharply defined by the black mark that encloses its political limits. There are, however, physically speaking, *five* Floridas, each unlike the others in certain particulars, but with no hard and fast lines of separation, while all possess many features in common. Florida is about four hundred miles long, and, in its northern part, as many broad, being the largest State east of the Mississippi River. Within this area of nearly 60,000 square miles—almost equaling New York, New Jersey and Delaware combined—there is a great variety of soil, climate, and production. When one is asked "How do you like Florida?" the cautious answer would be prefaced by another query, "Which Florida?" Yet the ordinary traveler visits Jacksonville, remarks its bustle and life; takes a trip up the St. John's River, stops over a night at Sanford or Enterprise, returns the same route, and goes back to his Northern home confident that he has "done" the Peninsular State. True, this was

the only Florida that offered comfort, easy travel, and the "modern conveniences" to the tourist of a few years ago, but now, railroads are fast opening up the entire country, settlers are pushing down to the very borders of the everglades, towns and villages are springing up like magic, and the visitor who flits southward another year, either for health or a home, can choose his own Florida.

What are the principal characteristics of these several Floridas? First, there is WEST FLORIDA. This comprises the long arm of the State lying south of Alabama and west of the Apalachicola River. Much of the soil is sandy, but it is well watered by clear running streams fed by springs, while the natural grasses afford considerable pasture. It is largely covered with vast forests of yellow pine, and along the borders of almost every stream the "logmen" are busy harvesting its riches. This region was until recently so isolated, that its representatives, in going to Tallahassee to attend the sessions of the Legislature, were forced to travel on horseback for days, threading the forests and swimming the rivers.

Secondly, there is MIDDLE FLORIDA, which lies east of the Apalachicola, and extends to the Suwanee River. Lying contiguous to Middle Georgia,* it partakes of its characteristics. A Northerner, traveling westward from Jacksonville on the Florida Central Railway, weary of gazing out of car-windows at monotonous stretches of pine forests, and gloomy moss-hung cypress swamps, is delighted to find here a high, rolling, clayey country, clad with oak, hickory, ash, and other familiar hard-wood trees.

Tallahassee, the capital of the state, lies near the center of Middle Florida. Crowning one of the many billowy undulations that distinguish this fertile section, it is, indeed, "beautiful for situation." On every hand rise swelling knolls, affording admirable dwelling sites. Their slopes, green with grass and growing crops, and their tops, crested with groves of oak, remind one of "Udders distended with a bounteous richness."

These red clay lands were settled early in the century, and thither came families from Virginia and the Carolinas, with their slaves. This was then *the* Florida. The productiveness of the soil enriched the planters, and the luxurious homes and bountiful hospitality of the people made famous the entire "Tallahassee country." Near the old towns the wanderer of to-day comes upon the ruins of once fine mansions, standing desolate amid the groves of oak that alone remain to mark the magnificent parks that, in the olden time, surrounded these abodes of wealth and gayety. Throughout this region are wonderful springs, from which rivers rise. Thus the Wakulla spring, the source of the river of that name, is four hundred feet wide and one hundred and eighty feet deep. The water is so clear that a half-dime dropped into its depth, is traced through its descent till it is seen lying on the bottom.

Thirdly, there is NORTH-EAST FLORIDA, extending from the Su-

*There are three Georgias—Upper, Middle, and Lower. The Florida-bound tourist who merely crosses the State, via the Coast Line Railroad, seeing only the dense swamps and sandy pine-barrens of Lower Georgia, gets no hint of the rolling clay lands of Middle Georgia, or the picturesque mountains and fertile valleys of Northern Georgia.

wanee River to the Atlantic coast, and traversed by the broad waterway of the St. John's. Though St. Augustine is the oldest town in the United States, yet this region is comparatively a new country. Prior to the civil war there were settlements at Fernandina, Jacksonville, and Palatka, but the light, sandy soil, of this section was not considered worth the clearing, since it would not yield grain, grass, cotton, tobacco, sugar, or rice—the chief remunerative products of slave labor. But a new civilization has dawned on the South. The standpoint of the slave owner has receded into the past. Free labor, united with Northern capital and industry, has introduced new idea of agriculture. The use of mineral fertilizers, ("Sto' Minyoe," as the negroes call them,) has developed a system of "intensive" farming. The thin sand that would grow neither grass nor corn, has been found well adapted to the orange, and this tree, never cultivated by the slave planter for profit, has opened up vistas of bonanza fortunes to many a far-seeing farmer.

Fourthly, there is THE LAKE REGION, a broad belt extending diagonally across the central part of the State. Here are hundreds of fresh-water lakes. In Orange County alone there are, as shown by the map, over 600 of these lakes, big and little, varying in size from a tiny pond up to a broad sheet of deep water a dozen miles across. These lakes are mostly fed by springs, and their margins are generally dry and hard. West of the St. John's River the land rises a hundred feet or more to a broad plateau, and sometimes into quite respectable hills. The tourist, familiar only with the low lands of the first Florida named, will be astonished to learn that in the western part of Orange County there are sand hills five hundred feet high. As I am writing these lines at Winter Park, (situated twelve miles south of Sanford,) on the very backbone of the lake plateau, I can speak *con amore* with regard to this beautiful region. Here is a dry, sandy ridge, lying between two of these exquisite little lakes—Osceola and Virginia. The former is the larger, and stretches for nearly a mile, picturesquely winding between gently sloping banks, thirty or forty feet high. The water is sixty feet deep, is soft and pure, and rests on a bottom of clean sand. These belong to a chain of twenty-two tiny lakes that empty into one another through swift babbling brooks, and flow into the St. John's River. From the roof of our hotel (*The Seminole*) one can see ten of these gem-like bodies of water shimmering in the sun. The pine forest that covers the whole region has a park-like appearance, the trees being tall, large and scattered so that that one can drive between them almost at pleasure. When these are cut down and the ground protected from the fires that annually sweep through the country, oaks spontaneously spring up and form a new growth. As in Eastern Florida, one misses the green turf. At this season of the year the bright yellow sand, with only patches of thin grass here and there, stretching off among the pines, far as the eye can reach, and glistening in the sun, looks poverty-stricken to one familiar with the black prairie soil of the West. But, turning from the sand, one's eye falls admiringly on the trunks of the patriarchal pines towering up straight and tall and crowned by tufts of needles, much richer, longer and fuller than our Northern pines, and he cannot but admit that this much-decried Florida

sand can build up a forest beauty all its own. The monotony of the pine woods, broken though it is by an occasional glimpse of the glossy-leaved magnolia, the stiff-crowned palmetto, and the many species of oak, tires, at first, by its endless sameness; but soon it grows upon him, and in trunk and tassel and hanging moss, in swaying limb and sighing leaves, and sweet balsamic odors, and in the long columnar shadows that each day slowly turn their index fingers over the sandy dial-plate, he finds an infinite variety that fascinates him more and more.

The rapid growth of certain parts of Florida is well illustrated in the wonderful development of this section of the lake country. Six years ago there was not a completed railroad in Orange County; now there are seven lines finished or building. Orlando, the county seat, was then a mere hamlet in the woods; during the last year it saw 163 new buildings erected, and business lots sold at the rate of \$36,000 per acre. At Winter Park there were a few orange groves and residences nestling upon the pine-covered slopes of lakes Osceola and Virginia, but surveyors' posts were the only signs of civilization visible from the railroad when Mr. L. A. Chase, of Chicago, stepped off the cars at this point five years ago. In his busy brain there flashed the conception of a rural city among the pines, and to-day the young town has a \$50,000 hotel, a pretty church, and a college with an endowment of \$114,000.

Fifthly, there is SOUTH FLORIDA, which includes the lower end of the peninsula, and the keys lying off the southern coast. Much of this section below Lake Okeechobee is a *terra incognita*, consisting, so far as known, of vast swamps, with occasional islands, which have been visited only by chance hunters and the scouting parties of United States soldiers in pursuit of the lurking savages during the Seminole war. This great jungle, and even the lake itself, is destined yet to be drained and the fertile soil turned into rice and sugar plantations. A successful beginning has been made, Lake Tohopekaliga has been lowered several feet, and a considerable area of submerged land has been reclaimed. I am told that sugar canes have been grown here that stood fifteen feet high, and from four stalks of which a gallon of juice was expressed.

Along the southern shore and upon the keys is the only bit of the tropics which we possess. Here flourish the pine-apple, banana, date, plantain, and cocoanut. The pine-apples are planted, ten thousand to the acre, and grow with only a little cultivation. The cocoanut requires to have its roots resting in brackish water. Its fibrous shoots, pushing down into the underlying coquina and coralline rocks of this coast, find a congenial home. A year ago over 500,000 cocoanut trees had been planted along the keys. One man has transplanted 100,000 young trees from South America to form his grove. A few cocoanuts formerly grew wild in Southern Florida, enough to show the adaptability of the soil to their culture, but the chief part of the early seed was obtained from a cargo of cocoanuts shipwrecked on this dangerous coast. What was a disaster to a few people has proved the means of founding a great industry. Fifty or more nuts are planted on each acre of land, and with no fertilizing, pruning, or fencing the tiny stems that struggle up through the sand will, in ten

or twelve years, mature into trees, each bearing from 100 to 150 nuts.

Thus Florida, sweeping through more than six degrees of latitude, affords a wide diversity of soil and climate, while its peninsular location, in a bend of the Gulf Stream, so modifies the temperature that the products of the tropical, the semi-tropical, and many even of the temperate zone, are grown on the same land. It is, therefore, a perpetual source of wonder to the visitor to find in one garden cabbages and century plants, peaches and figs, strawberries and pine-apples, growing side by side in friendly rivalry.

A SCHEDULE OF COMPOSITION WORK.

The following schedule was prepared by Harriet A. Keeler, teacher of English Composition in the Central High School of Cleveland, and has been in use there about eight years. We have adopted the same course in the Free Academy here at Rochester, simply because we know none better adapted to the wants of secondary education. Our experience with pupils from fifteen to twenty years of age has led us to the conclusion that with a thoroughly live teacher, the plan indicated in this schedule, if intelligently followed and ably executed, will prepare the way for excellent results in a subject too often neglected in the High School course of study. The course contemplates one lesson per week.

PRINCIPAL Z. P. TAYLOR, *Rochester Free Academy.*

D OR FIRST YEAR.

WRITTEN EXERCISES.

If the pupils study History, one or two sketches of noted persons, about whom they are studying, is an excellent beginning,—a test merely of capitalization, punctuation, penmanship and sentence construction.

They should be instructed to weave anecdotes into their work. They are not equal to any analysis of character. The simple, straight-forward expression of fact is all that it seems wise to require. Models to read to the class: *Dickens' Child's History of England*. *Stories of a Grandfather about American History*. Selections from "*The Story of Liberty*."

Two of these are sufficient.

OTHER WORK. *Review of the use of Capitals.*

Obvious faults in writing corrected (children of this age cannot manage long sentences very well). (a). Exercise, use of certain words, as *nice*, *about*, *awful*, *because*, etc. (b) From twenty to fifty words usually mispronounced, carefully taught. (c) Diacritical marks and use of dictionary.

REPRODUCTION WORK IN CLASS.

Select some author who has written in the style and upon subjects similar to those the class are to write upon. Read to them and have them reproduce the work as nearly as possible; or at times read to them for some time that they may catch the spirit of it, and see how the subject should be treated. The class are now much better prepared to write than before.

WRITTEN WORK.

Narration—Personal Narrative. Models—Hawthorne. Note Books—Duphaven.

OTHER WORK.—*Quick Work.*

Subjects given in class: *Oral work Exercise*—Each member of the class telling the story of a poem, or relating an anecdote. *Spelling Exercise* of the words mis-spelled in their compositions. Obvious faults in writing corrected in class exercise. *Written Exercise*—Reproduction of stories of *Arabian Nights*, *Pilgrim's Progress*, *Robinson Crusoe*, *Swiss Family Robinson*. Any tales of Travel and Adventure.

It will often happen that children do not break through the habit of reserve, or the timidity, or the laziness which induces them to say what they have to say in the fewest possible words. The reproduction of these stories will often develop a fuller expression than they have used before.

OCCASIONAL SPELLING EXERCISE. OCCASIONAL EXERCISE IN DEFINITION. QUICK WRITING IN CLASS. ORAL WORK.

WRITTEN EXERCISES. *Simple Descriptions*—Always objects the pupils have seen.

(*Best Models*—Paragraphs from *Hawthorne*, *Dickens* and the magazines).

ADDITIONAL WORK.

Study of Letter Forms,, Oral Descriptions, Correcting False Syntax. (Examples taken from the themes of the class, or such as the class bring in supplemented by the teacher).

This is sufficient variety for a half year's work. Of course the order may be varied as the teacher prefers, but nothing here is beyond the capacity of the pupil.

WRITTEN EXERCISES. Descriptive style varying to narration. Best models in Harper's magazine.

ADDITIONAL WORK.

Rules of punctuation complete, Exercises in pronunciation and spelling. Quick work, Oral work.

Written reproduction of the story of poems. Examples—*Wreck of the Hesperus*, *Paul Revere's Ride*, *Death of Arthur*, *John Gilpin's Ride*, etc.

Study of Simile, Metaphor, Synecdoche and Metonymy. Obvious differences between poetry and prose.

QUICK WORK. Oral reproduction of the story of poems.

WRITTEN EXERCISES. Subjects which call for *reasons*,—as Why do we study Latin? Why do we pay taxes? Why do we have an election every year? etc.

ADDITIONAL EXERCISES.

Exercises in Pronunciation, Review of Letter Forms, Notes of Hand, etc. Newspaper paragraphs, lost, wanted, found, etc.

ORAL QUICK WORK. WRITTEN EXERCISES.

Subjects which call for *Imagination*, e. g. Life of a Butterfly, Story of a Silver Dollar. (Models in the readers).

ADDITIONAL WORK AS BEFORE.

This will be sufficient for the first year's work.

C OR SECOND YEAR.

WRITTEN EXERCISES.

Reproduction of longer poems and stories. Examples—*Prisoner of Chillon*, *Lay of the Last Minstrel*, *Evangeline*, *Sella*, etc.

ADDITIONAL WORK AS BEFORE.

WRITTEN EXERCISES. Return to Narration. *Models*—*Bayard Taylor*, *Dudley Warner*, *Hawthorne*, *Thoreau*, magazines.

ADDITIONAL WORK AS BEFORE.

WRITTEN EXERCISES. Sketches of character. *Scrooge in Christmas Carols*, *Shylock in Merchant of Venice*, *Rip Van Winkle*, etc.

Avoid Historical characters, e. g., Washington or Napoleon. You will get nothing but dates and facts.

Description of Natural Objects—Flowers, Trees, Animals, Birds, (always those the writer has seen). *Models*—*Grace Greenwood's Story of My Pets*, *Emerson's Trees and Shrubs of Mass.*, *John Burroughs*, *Higginson's Out-door Papers*, etc.

Sometimes give the class an order of treatment as a guide—but it is advisory only—not obligatory.

STUDY OF SENTENCES.

Characteristics—Correctness, clearness, unity, energy, harmony. *Models*—Paragraphs in *Froude*, *Irving*, *Dickens*, *Hawthorne*, *Bret Harte*, etc.

ADDITIONAL WORK AS BEFORE.

Spelling, pronunciation, quick oral work. Special study of False Syntax.

WRITTEN EXERCISES.

Observation of Three Days. Winter or Summer Day. Characteristics of October, April, May, etc.

Descriptions principally. Study of kinds of Writing—Narrative, Descriptive, Union of the two, Argumentative, Didactic. Study of *Proverb*, *Parable*, *Fable*, *Allegory*. (I would introduce these for entire change of subject).

Plots of Books—*Vicar of Wakefield*, *Pilgrim's Progress*, *Mill on the Floss*, *Uncle Tom's Cabin*, etc.

ADDITIONAL WORK AS BEFORE.

Subjects involving Reasoning. Easy subjects, e. g., Should Capital Punishment be Abolished? Should Intelligence be a condition of Suffrage? etc.

Simply an opportunity to try their hands at such work, no thorough study of arrangement or principles.

ADDITIONAL WORK AS BEFORE.

WRITTEN EXERCISES.

Amplification of Stories, which involves imagination. Models for these are difficult to find. Suitable subjects are such as *Song of the Mistletoe Bough*,—the pupils reconstructing the castle, the dress of the bride, the bridal party, the scene of the disappearance, effect on the company, etc. At the close of the C year there should be review of *Rules for Capitals, Punctuation, Forms of Letters*.

STUDY OF PRINCIPLES OF CORRECT PARAGRAPHING.

B OR THIRD YEAR.

Short written themes in narration, description, both combined, argumentative style, didactic, direct discourse, indirect discourse,—simply to see if the class comprehend these and can write them. Models from any source which is trustworthy.

ENGLISH VERSE.

Standard Feet in English Rythm—Rhyme—Scan Poetry. Finally let the class write rhymes. (Principal object that the pupil shall know the *construction of English Verse*, rather than to make poets).

WRITTEN EXERCISES. *Pen Pictures*. Subjects suitable are: *Supreme Moments in History, Crises in Lives of Men and Nations. Models*—Selections from *Motley, Froude, Carlyle, Allison*. All the Quick Work, Oral Work, Correction of Errors, etc., as before. Careful study of the simple principles of Logic, Forms of Propositions, Terms, Premises, Conclusions.

STUDY OF SIMPLE FALLACIES.

Study of best *arrangement* of Persuasive Discourse *Models*—*Webster's Address to the Jury in the Murder Case at Salem* (this is in the readers and pupils can get it), and examples from newspapers.

HAVE ORAL DEBATES.

From two to four on a side. (Sometimes results are admirable, other times poor. Boys do better than girls generally).

WRITTEN EXERCISES

To develop the *Imagination*, Fairy Story. Imaginary Conversations. Imagine scenes of Geological Past. Visit to impossible places. Models for the work can be found in *Hans Andersen, St. Nicholas*, etc. (Here girls do better than boys).

GENERAL REVIEW OF PUNCTUATION, CAPITALS, LETTER WRITING.

ONE ORIGINAL STORY WRITTEN.

(I would give a plot. If the pupils prefer their own, they take it. It takes two written exercises to complete the story).

STUDY OF ORATORICAL STYLE.

Models, The Speeches of the Revolutionary Fathers and the Leaders in the late war. Gather up the results of the years gone before. Have the class write personal experiences as they did in D—Descriptions, Poems—anything and everything in quick work and time work to gain facility.

A OR FOURTH YEAR.

BOOK REVIEWS.

For subjects *Plays of Shakespeare*, poems like *Lay of Last Minstrel*, novels like *Mill on the Floss*. Frequently we would be obliged to read the book in class. In that event take a play or a poem. Look for models in *Critical Essays of Macaulay* and *Jeffreys, Whipple*, etc. For ordinary book review—to the magazines.

Teach the difference between a book review and the plot of a story.

THE SUCCESSORS OF LATIN AND GREEK.

PRINCIPAL SAMUEL THURBER, ROXBURY, MASS.

The disestablishment of Latin and Greek as indispensable conditions of a liberal education is evidently taking its own course regardless of protests from the schools. The attitude of secondary teachers toward the movement should at once adjust itself to the plain facts of the case. Resistance being useless, perhaps guidance will prove to be in some degree feasible.

The ancient languages will have been well thrust aside if their places are filled with the right substitutes; while even these medieval disciplines would better be retained than be displaced by some of the many subjects seeking admission to the schools. It will be sad indeed should teachers, in their chagrin at seeing Greek removed from their programmes, become indifferent as to what modern subject takes its place.

The new opportunity created for the secondary schools by the establishment in several prominent colleges of courses without either, or with only one ancient language, may be wisely regarded as a glorious chance for the infusion of new life into the work of *fitting for college*. What educators of insight have hitherto striven for with their Latin and Greek, but have always come short of by reason of the impossibility of achieving fluency in these languages, can henceforth in liberal measure be attained through the natural medium of the mother tongue. In antiquity are wrapped all the presuppositions of modern civilization. To bring the youth as fully as possible into contact with antiquity in its many aspects of literature, art, law, religion, is a fundamental purpose of the secondary school and the college. But antiquity is no longer unlocked by any attainable knowledge of the ancient languages. Only he who contemplates original research in antiquity absolutely needs a command of the languages, and he needs a command of them far more thorough than can be gained within the limits of any except special courses of philological study. The truth is, antiquity is now studied almost wholly through the medium of the modern languages, and the results of antiquarian research are offered to the world in forms adapted to the comprehension of modern men of only average leisure. The wonderful advance recently made in all departments of historical study has no relation to any new development of special philological interest. The culture nations are waking up to a sense of the paramount importance to them of a knowledge of their own beginning. The study of primitive man is engaging the attention of earnest investigators, whose discoveries and theories find response in great masses of educated persons. This vivid interest in antiquity, pervading the great body of intelligent thinkers in all modern nations, connects itself much more obviously with the progress recently made in natural science than with any other perceptible phase of intellectual enlargement. Certainly it owes no thanks to the very rudimentary knowledge of two ancient languages possessed by graduates of secondary schools and colleges.

This interest in antiquity is a most legitimate and wholesome trait of advanced nations. The upper education of youth should be largely directed in channels marked out by this tendency. In our Latin and Greek teaching we have aimed in this direction, but without hitting our mark. At last the instruments were regarded as the objects to be attained. So much varied erudition has gathered about Latin and Greek grammar, that we have come to talk about *mental discipline* as the object of our laborious teaching of these languages. To appeal to *mental discipline* as a justification of our devotion to the classics is to acknowledge ourselves hard pushed for arguments. It is a confession that the grind of the rudiments is all we attain.

But using the mother tongue one may come into relation with all current thought concerning the childhood of the race, concerning the early civilizations, concerning the whole indebtedness of the modern world to the ancient world. The whole range of historical studies can be amplified, with most wholesome results to culture, provided the laying aside of an ancient language or two can be acquiesced in. History is not yet, in spite of much recent improvement, taught with all possible fruit. The literatures of Greece and Rome, always read in petty and insignificant portions when read in the original,—and this, on the best of testimony, even in the German gymnasias,—can, in English, be read cursorily and in quantity, as one reads every interesting book, with memorable results and great gains of far reaching knowledge. Certainly, no parent, desiring that his child should, in his course of education, make the acquaintance of Homer, Herodotus, and Plutarch, would send him for that purpose to a classical school, or to the classical course in a college.

One important direction in which to guide the activity of young minds emancipated from the paradigms and from the petty translations and versions of elementary classics will therefore be towards more and freer reading, under wise supervision, of those works of history, biography, and poetry, either original in the mother tongue, or translated into it, which have assured rank as masterpieces and which possess a certain world-significance, receiving the homage of successive generations and binding nations together in a common consciousness. A wise pedagogy will see to it that appropriate selections are made for each step in the pupil's advancing maturity.

Prof. Paulsen, who forecasts the speedy abandonment of Latin and Greek from secondary programmes, hopes to see *Philosophy* inherit some of their peculiar privileges. Whether a propaedeutic in philosophy suitable for youth in American high schools, more fruitful of results than the traditional mental sciences, can be devised, the philosophers who believe in it will have to demonstrate.

The mother tongue itself will, of course, enter into new rights when the unattainable tongues of antiquity shall have been set aside for the specialists. The methods of instruction in English have not yet taken distinct and defensible shape, as English has always of necessity been held inferior to the ancient languages in school plans, and as the methods of teaching it have always imitated traditional ancient language methods, under which it was impossible it should thrive. The possibilities of English teaching are as yet surmised by

none except the enthusiasts in English literature. These will yet have their day.

What has crowded the ancient languages into the corner is not modern science merely, or the modern languages merely, but the modern spirit, which it would be a great mistake to stigmatize as materialistic or utilitarian. Wise modernists do not wish to substitute the so-called useful arts, manual training, commercial accomplishments, or even the natural sciences, for the old training in elementary Latin and Greek. Education must remain a peculiarly spiritual concern of humanity, the foundation of the spiritual welfare, rather than of the industrial pre-eminence of nations. The ancient languages will go; the modern tendency cannot be resisted; but it is for far-seeing educators to care that

"When half gods go,
The gods arrive."

NATIONAL AID TO SOUTHERN EDUCATION.

One important result of the census of 1880 was to reveal the illiteracy of the South. It appeared that in South Carolina 52 per cent., in Mississippi and Louisiana 47 per cent., in Alabama 46 per cent., and in Georgia 45 per cent. of the male population were unable to write their own names, and that all the rest of the States of the "black belt" were nearly as badly off. These facts made a profound impression; for it was obvious that the success of a government like ours depends upon the intelligence of the voters. President Garfield declared in his inaugural address that the National Government should adopt vigorous measures to avert the danger threatened our institutions by Southern ignorance.

The suggestion of national aid in the case was at once adopted by the generous North. It was urged that an appropriation by the National Government for education in the South would not be a gift of charity, but a debt due by justice; that, as the nation had emancipated the blacks and put the ballot into their hands, it was bound to assume the corresponding obligation to educate them sufficiently to enable them to cast their ballots intelligently. Besides it was pointed out that the Government had already rendered educational assistance to the new Western States by setting apart school lands, and that there was all the more reason for rendering such assistance to the South which was in more urgent need of it by reason of the national act of emancipation. The charge of the unconstitutionality of such action was met by allowing all the States to share in the appropriations according to the number of illiterates each contained.

These arguments carried through the Senate of the Forty-eighth Congress the Blair Bill which provides for the appropriation of \$100,000,000 to be distributed among the States during a period of ten years upon the basis above-mentioned. The measure, however, was not taken up in the House, and so lapsed with the end of the session. Senator Blair has reintroduced the bill in the present Congress, and its friends are confident of securing its enactment.

But serious doubt has been thrown upon the plausible assertion that the passage of the bill would be a good thing for the South. Both in the South and North a strong opposition to the bill is developing. "Illiteracy is a bad thing for a community," says *The Nation*, "but it is not the worst thing. The vital element of any success that is worth achieving in this world is self-reliance. The man who works his own way to an education may not acquire it as soon or get as good an education as one who receives it at the hands of charity, but it will be worth a great deal more to him, and he will be worth a great deal more to the community. The same principle holds as true for the State as for the individual." Though the analogy here drawn between the individual and the state is not a strong one, but somewhat misleading, still it is certain that that state which by self-denial and its own exertions educates its citizens will be as much more strong, self-reliant, and self-respecting than the state which depends upon the Federal Government to do this thing, as the American colonies developed into stronger, prouder commonwealths by reason of having had to make their own way than did the French colonies in Canada which under the "old regime" had no vigorous growth by reason of having relied upon the fostering care of their mother country. While therefore under the Blair Bill more Southern voters would be able to read ten years hence, the states would have purchased their education at the cost of those essential qualities which go to make the states of the North what they are.

The experience of Connecticut illustrates the demoralizing effect of relying upon outside funds for the support of schools. The proceeds of the sale of her western reserve lands were devoted to a school fund in the expectation that the standard of public education would thereby be elevated; for it was not anticipated that the efforts the people were then making would be relaxed. But this is just what took place, and the schools became poor and short. The towns depended upon this fund for the sole support of the schools, and the citizens felt no responsibility and therefore lost all interest. "This was the darkest period of our educational experience," says Mr. Hine, Secretary of the Connecticut State Board of Education. But "happily the danger from this direction is passed and cannot return," as "the fund has reached its greatest productiveness and the amount *per capita* will constantly decrease."

These arguments against the bill are all the stronger as the South is already making remarkable and successful efforts in the schooling of her children. From 1874 to 1884 the number of pupils in the public schools of South Carolina increased from 110,416 to 185,619; in Mississippi, from 166,204 in 1876 to 266,996 in 1883; in Florida, from 20,911 to 58,311; and like gains are reported from all the rest of the states. The only defects are that the teachers are not so good and the terms not so long. But the South is growing more and more prosperous, and these defects can soon be overcome. In Georgia the colored schools are nearly supported by what the blacks alone pay into the treasury. Gov. Lowry of Mississippi says that the common-school system is in a healthier condition than ever before, and that the interest in favor of it is steadily increasing and assuming a more intelligent and well-defined form of action.

THE STATE SUPERINTENDENCY.

OFFICE OF THE ACADEMY
 SYRACUSE, N. Y., Feb., 1886. }

With a view to ascertaining, as far as possible, the wishes of leading school-men in the choice of State Superintendent of Public Instruction, we are sending the following questions to all County Commissioners, City Superintendents, and Principals of leading schools throughout the State. The answers will in all cases be held strictly confidential as far as the individuality of the person writing is concerned, but a tabulated statement of the result will be given in THE ACADEMY for March. Replies should be returned to this office not later than Saturday, February 20.

1. Are you heartily in sympathy with the recently expressed desire that the successor of Mr. Ruggles be "emphatically a school-man?"

2. Of all the men in the State, who would be your first choice for the office?

3. What is the preference of the teachers under you?

4. Who is the choice of the teachers in your immediate locality?

5. If principal of a school, how many academic pupils do you register?

How many other pupils are under your supervision?

Relying upon your interest in this matter, we await your reply.

On February thirteenth the above circular was sent to every city superintendent and every county commissioner in the State, as well as to nearly three hundred principals—four hundred and twenty in all, and with each went an envelope stamped and addressed THE ACADEMY, Syracuse, N. Y.

The answers have proved very entertaining reading. They vary all the way from the feeble teacher who doesn't want to favor anybody because it may hurt some other one's feelings, to the outspoken principal who has no patience at seeing "the highest educational office in the greatest State of the Union filled by a man who commands little respect from the teachers in his own State and none at all elsewhere." They come from the principal who spells Professor with two *f*'s and the commissioner who is in sympathy with the recently expressed desire that the successor of Mr. Ruggles be emphatically a school-man, "Provided one can be found who is also a politician."

It may easily be said, as it has been said by some, that teachers have no voice in this matter, that the politicians always have decided it and always will decide it, and that the opinions of teachers count for nothing. We believe, however, that right here it is in the power of the teachers of the State to effect a change.

We do not say this is wise or desirable. It may be, as many urge, that outside men are better judges in such matters than teachers, that there is something narrowing and dwarfing in the petty round of school-work, and that teachers are their own worst enemies. We simply say that, if it seems wise and desirable, it can be done; but it can be done only by united action.

It has been said that the office has no really educational function, that if a man can have the apportionment of money made out correctly he is competent to fill it. Those who believe this *should* be so have ample ground for their indifference. We believe the office should command the highest educational knowledge and experience joined with judicial and organizing talent, which the State or the country can furnish, and we are sure that a man combining these

qualities would soon demonstrate the capabilities of the office, and his influence for good would be felt throughout the State. No matter what the functions of the office are now, the man would stand out above the office and command respect and influence.

Thirty-odd years ago a man came to this State un-heralded and without friends in power. He built up among us the first institution of its kind in the country, supported by the State. He was modest and unassuming to the last degree, he never was called a politician, he held no office, dispensed no patronage; and yet it is said that he never went before the legislature, in all the changes, complications and corruptions of a quarter century, with a recommendation that was refused. He commanded respect and influence simply by what he was. What Dr. Wilbur did for his special work, that might the right man in authority do for education in this State.

Replies have come in thus far from 48 commissioners, 14 superintendents, and 154 principals—216 in all. We tabulate the results as follows:

	<i>Principals.</i>	<i>Com.</i>	<i>Supt.</i>	<i>Total.</i>
Dr. W. J. Milne.....	80	25	8	113
Rev. Mr. Hawkins.....	27	3	..	30
Prof. J. H. French.....	3	5	..	8
Dr. David Murray.....	5	1	1	7
Hon. J. J. Gilbert.....	3	2	1	6
Scattering.....	21	8	..	29
Expressing no choice.....	15	4	4	23
Total.....				216

Dr. Milne seems to be the favorite in the larger schools, the principals voting for him having on an average 85 academic and 295 other pupils each, while those favoring Mr. Hawkins, the next candidate, averaged 54 academic and 178 other pupils.

Now we are well aware that all these figures settle nothing. Not every teacher who receives a circular with a stamped envelope has time and inclination to make reply. We know besides that many teachers take no interest in the matter. They are busy about their own concerns, and the State Superintendent of Public Instruction never comes near their zenith, if he ever appears on their horizon. We sent out these circulars because we wished to learn. We have found out the percentage of interested ones, we have learned much of the preferences of localities and sets of teachers, and not a little of the prejudices of our co-workers. We know now not from hearsay but from each man's hand-writing what is his choice, his degree of interest or apathy. We have had no view to helping or hindering any man's prospects. The editor has his own preference and feels it strongly, but here he has no voice of his own. It is the teachers of the State, through 216 representatives, that speak. No opinion has been modified, no choice suppressed.

Our personal word, however, the editor thinks he may add. This question should come home to every teacher who pleads for a school-man:—Am I in favor of a school-man because my favorite candidate happens to be such, or am I in favor of a school-man rather than a politician, even if the former is not my personal preference? If the majority of teachers is in the latter class, now is the time for them to unite and work. If not, let us drop the subject.

COMMUNICATIONS.

The Cambridge, Mass., High School is about to be divided into two distinct schools,—a classical, or college-preparatory, and an English or scientific school. The division may be temporarily convenient by reason of the large size of the single school as hitherto organized, but it is nevertheless quite out of harmony with the tendency of the time, and will ultimately be regretted. Nothing can well be plainer than that the single, narrow, wholly prescribed course of study in preparation for college is rapidly giving place to manifold courses embracing the optional element in large measure. Pretty much all the studies hitherto included in high school programmes will soon be available as preparation for admission to college. The ancient languages are to be relieved of the burden of protection which has made them especially obnoxious to modern discontent, and will take their chances with the numerous other blessings of a liberal education. The further this tendency becomes realized, the more feasible it becomes to have a single high school, whose course shall be multiform and shall open various routes to college, which shall also be the best possible routes to business. The pretence of a monastic, secluded course for some, and a useful, semi-industrial course for others, must be ere long given up as having no grounds in the American consciousness or in a sound philosophy of education.

In Cambridge, the master of the old school, Mr. Wm. F. Bradbury, goes with the Latin school, and a new principal takes the English school. Mr. Bradbury has had remarkable success in fitting boys for Harvard College. This function he will have to share with his new colleague whenever the reforms which Pres. Eliot is laboring to introduce into the requisites for admission to college shall be practically inaugurated. These reforms are sure of accomplishment. The only question is whether Harvard shall be well in the van, or towards the rear, of the movement.

* *
*

Editor of Academy:

Are we teachers doing the wisest thing by putting *Cæsar's Commentaries* into the hands of Latin pupils of the lower grade? Are there not other books better adapted to the ability of scholars who have just completed their first year of Latin? And further cannot THE ACADEMY give us your idea of just what can be done the first year in Latin and what are the wisest things for the teacher to attempt?

For one I am glad you have started a journal in the interest of secondary schools, not because we lack excellent educational periodicals, but because the number of schools doing secondary work is sufficient to justify a paper devoted solely to them. You need have no fear of a lack of support.

B. T. C.

Our own personal opinion is that *Cæsar's Commentaries* is *not* the best book with which to begin reading Latin. We will try and

publish in the next ACADEMY the opinion of a friend who has given special thought to the subject and on whose judgment we entirely rely.

We publish the following from a leading teacher in one of the most famous schools of New England as a just and cordial tribute to the immediate constituency which THE ACADEMY represents :

"I have received THE ACADEMY, and read it from cover to cover with much interest. Of course I was surprised, not that *you* should do it, but that the thing should be done at all. And yet I suppose that I ought not to have been surprised ; for certainly there is a field to be covered by just such a journal as THE ACADEMY proposes to be.

It is a hopeful sign of progress that the Principals of New York have come to feel the need of such a journal, and I hope that the excellence which THE ACADEMY will attain will justly reflect the progressive spirit and enthusiasm of its constituency. If the principals of your State are alive to their own interests and the interests of their cause—and not only the principals, but all the teachers of the State—then I predict for you abundant success in your new enterprise. And that the New York Principals are awake, vigorous, enthusiastic, the minutes of the Holiday Conference furnish sufficient evidence. It must be from this that you get your encouragement and the faith that is in you. You may count me one of the subscribers."

NOTES.

We are pleased with the kindly reception accorded to the first number of THE ACADEMY. Due consideration has been granted to our inexperience, and hearty wishes for our success have been expressed. We feel under special obligations to *The University*, *The Nation* and the *New York Evening Post*, for words of encouragement.

The editor's promised paper on *The Royal High School of Edinburgh* is crowded out by other matter. We hope to find space for it next month. The April ACADEMY will contain an article on *A High School Cabinet, and how to use it*, by Dr. Walter A. Brownell. Dr. Brownell has collected, put in order, and in his classes makes daily use of, a cabinet of over 30,000 specimens.

Dr. Bouton has been elected principal of the new State Normal School at New Paltz.

Dr. Murray, Secretary of the Board of Regents, is still confined to his house where he has been ill now fully two months.

A bill was introduced into the legislature, February 11, fixing the salary of Dr. Murray at \$4,500, and Dr. Watkins, at \$3,000.

The friends of the bill for increasing the Regents' appropriation by \$75,000 had a hearing before the Ways and Means Committee,

Wednesday, February 24, at 3 P. M. The prospects of the bill in the legislature are considered excellent, but the Governor's attitude toward it is said to be not reassuring.

A very successful meeting of the Wyoming County Teachers' Association was held at Warsaw, February 5th. Professor Buckham, Principal of Buffalo State Normal School, delivered the lecture. The following officers were chosen for the coming year : President, J. P. Worden, of Perry; Vice-President, J. J. Lentz, of Castile; Secretary, Miss Nell J. Chaffee, of Attica.

On the 2nd of February John D. Philbrick died at Danvers, Mass., in his 68th year. For forty years his has been a well-known figure in the educational world. We purposed giving a sketch of him and his work, written by a leading Massachusetts teacher, but the memorial number of the N. E. Journal of Education, just received, covers all phases of his career completely. So we give our space to other matter.

We have received the first number of *The Citizen*, the official organ of the The American Institute of Civics. Its motto is "Good Government through Good Citizenship." The articles are well-written and the subject is one in which every man has a personal interest. Outside of his own profession no object deserves at the teacher's hands more earnest consideration or more active help than the cause *The Citizen* advocates.

At some future time we shall have something to say concerning the Modern Language Association, an organization effected some three years ago in the interests of better methods for the teaching of modern languages. With January of this year it began the publication of *Modern Language Notes*, edited by Prof. A. Marshall Elliott, of Johns Hopkins University. Its first number was evidently tentative, and the second shows a great improvement in form. The matter, however, in both is all that could be desired, and the array of illustrious names presented on its pages gives excellent promise not only for coming numbers of the *Notes*, but also for improvement in the teaching of modern languages.

Toward the close of the year died Pietro Siciliani, professor of pedagogy in the University of Bologna, Italy. Siciliani was perhaps the most prominent of recent Italian pedagogists. An active and thoughtful participator in the movements for establishing a more fruitful relation between modern psychology and practical education, he knew how, with his facile pen, to help those who seek to understand existing tendencies. As contributor to the *Rivista Pedagogica Italiana*, he had articles in the numbers for October and December, 1885. The number for January, 1886, appears in mourning for his death.

Siciliani's two principal works, *Critical History of Pedagogical Theories in relation to the Political and Social Sciences*, and *Science in Education, according to the principles of Modern Sociology*, were issued with his portrait, so that his readers in foreign lands became somewhat

acquainted with his personality and feel a warmer interest in the grief of his countrymen. Slighter publications of Siciliani are *The Psychology of Childhood and the function of the Fable in Education*, and the preface to the Italian translation of Pérez's *Education from the Cradle*.

We have read with pleasure the remarks made by Prof. George F. Comfort before the joint committees of the Senate and Assembly, February 24, in advocacy of the bill to transfer the appointment of Superintendent of Public Instruction from the Legislature to the Board of Regents. It presents a carefully written and exhaustive view of the subject. We regret our inability to give more than a brief extract, which voices the sentiment of every friend of education in the State.

"It would seem scarcely necessary to assert that a State Superintendent of Public Instruction should be in the highest sense of the term an educator by profession. He should be well versed in the historical development of pedagogical science. He should know intimately the history of education in this State, and should be acquainted with the educational systems in other States in our Union, and with those of the most advanced and older civilized nations. He should have had extensive experience in practical teaching. He should be honorable, honest and conscientiously devoted to teaching as his life vocation. He should not be merely a learned theorist, but should also have intimate knowledge of men and affairs, and should be in sympathy with the active, living world around him.

"In short, the Superintendent should be qualified to carry out the chief functions of his office, as expressed germinally with so much terseness in the Section of the Statute which requires him to *report to the Legislature plans and suggestions for the improvement of the schools and the advancement of public instruction.*"

It is no part of our plan to print programmes unless they present some intrinsic interest. The following, which comes to us from the Brockport Normal School, is, however, novel to us and contains a suggestion worthy of being followed.

Literary Exercises of Arethusa and Gamma Sigma, Monday, January 25, at 7:30 p. m.

THE FRENCH REVOLUTION.

PROGRAMME.

1. PIANO SOLO.—Valse, - - - - - *Chopin*
VIRGINIA G. OLIVER, Brockport.
2. ESSAY.—Causes and Results of the Revolution.
EMMA JEAN HANEY, Seneca Falls.
3. DECLAMATION.—From "Tale of Two Cities."
HENRY C. STEVENS, Bergen.
4. MUSIC.—Marseillaise Hymn. - - - - -
5. ESSAY.—Louis XVI. and Marie Antoinette.
GRACE I. BETTERIDGE, Brockport.
6. ORATION.—Robespierre and his Colleagues.
ALBERT G. DUNCAN, Rochester.
7. MUSIC.—Threatening Death to Traitor Slave. - - - - -
8. RECITATION.—France, an Ode. - - - - - *Coleridge*
ELGIVA A. SIGNOR, Binghamton.
9. ORATION.—In Paris during the Revolution.
CHARLES F. KINGSLEY, Brockport.
10. CHORUS.—"Hail to thee, Liberty." - - - - -

Twenty years' reading of the *Nation* has brought us to the conviction that that paper holds the very highest rank for about all the qualities that go to make up an interesting, instructive and trustworthy journal. Above all things the *Nation* knows and practices the rule of not seeming to know unless in possession of the knowledge. That is, it is honest, and does not indulge in phrasing. While, therefore, we are surprised to find, in its issue of January 28th, what seems to us a bit of sensational and unmeaning verbiage, we nevertheless venture to hope that the opportunity may arise for further explanations that will make the passage referred to appear to us as axiomatic as it evidently does to its writer. Says the *Nation*, in its note on an article in a current magazine: " * * * the notion—that miserable outgrowth of our high schools—that hard labor is degrading * * * ." Does the *Nation* know anything about this "miserable outgrowth of our high schools?" The phrase is a hackneyed one. Hackneyed phrases do not usually count for much with clear-headed men. Can this phrase be shown to have any content of fact? Does this "miserable outgrowth"—miserable indeed if it is anything but a delusion—attach to the American high school any more than it does to the secondary schools of Germany or France?

As a consequence of our reading of many educational papers, we have not infrequently recommended the *Nation* to our fellow high school teachers as being itself the best educational paper we knew. But the self-evident propositions in education,—we really must beg to assure the *Nation*,—do not include its assumption that the notion that hard labor is degrading is a miserable outgrowth of our high schools.

Our High School has 540 pupils. Last year we made out a list of graduates from the beginning, thirty years in all. In that number there is not one living boy who is not either studying for a higher calling or earning his own living at a reputable business. Of the girls we cannot speak with the same assurance. But we can point to two recent valedictorians who are relieving their mothers of the nuisance of domestic servants, by helping at the housework themselves. These are visible facts. Can the *Nation* show equally explicit evidence on the other side?

Students and teachers of Greek have within a few months had occasion to congratulate themselves on two literary events of importance in the field of Homeric study.

After an interval of fourteen years since the appearance of its first fascicle, Ebeling's *Lexicon Homericum* is at last completed and becomes accessible for easy and practical use. So general has become a knowledge of German and so slight a command do most classically educated men possess of Latin, that it may fairly be doubted whether non-German students will be disposed to thank the editors of this dictionary for publishing it in the dead language. Its chief value will be in its copious citation of passages,—"*verborum index locupletissimus*,"—in which respect it approximates a concordance. A book of 1,700 large octavo pages, it illustrates German industry and perseverance in collecting all that is anywhere known of the origin and

use of Homeric words, and may be pronounced indispensable to the specialist in Homeric investigation.

Of wider interest is Buchholz' "*Die Homerischen Realien*," whose first part bears date 1871, while the last came to hand not many weeks before the end of 1885. This is a book to read and enjoy, like Homer itself. What the Greek of the Homeric age knew of the universe, how he conceived his gods and worshipped them, how he organized his state, how he ordered his public and private life, how he fought by land and sea,—in short, the whole ensemble of human concerns in that primitive day, forms the theme of Buchholz' three large volumes. The author had already won reputation as an investigator in a related field by performing the service for Pindar and Æschylus that he here renders to Homer. His work is singularly free from theorizing and from attempts at fine writing. It is a careful and detailed statement of Homeric facts, comprehensive and exhaustive in the true German manner, not colored by personal enthusiasm, though directed and sustained by a zeal to grasp the whole truth and nothing but the truth. While the grammarian sees in Homer a store-house of Greek forms, and the literary critic deduces from his works the canons of epic poetry, the student of primitive man goes to this inexhaustible source of ancient lore for data important to his absorbingly interesting science. In this field of research,—the same in which Gladstone is so notable a worker,—Buchholz, by the work above named, holds perhaps the foremost place.

In response to numerous requests, THE ACADEMY has undertaken to collect statistics regarding the study of Greek. In pursuance of that object a circular embodying the following questions has been sent to 150 schools in this State during the past fortnight. Within a few days a similar circular will be sent to leading classical schools throughout the country. That mistakes will occur in sending these is obvious. The editor therefore will be under obligation to any teacher not receiving one who will forward to him such statistics as are at hand on this subject. The enquiries are made solely in the interest of teachers. THE ACADEMY will not seek to prove that Greek ought to go or ought to stay, it will merely state the results of its investigations.

Just here we think it right to say something of the function of the ACADEMY as we conceive it. This journal is not the personal organ of one man. It means to be the voice of a large and thoughtful body of teachers. On certain broad lines those teachers are a unit, and while we deprecate all appearance of arrogance, we intend to speak with no doubtful emphasis where we voice the common sentiment of the best teachers. Outside of these lines, opinions differ widely, and no class of people is more sensitive than teachers. We shall deal frankly and without guile. The ripened thought of any principal will be welcomed in this paper, even if he expresses the views of a small minority. We shall not try everything by our own personal standard. Other teachers may have pondered long on what we think of now for the first time, and we do not care to place our hasty opinion against their matured judgment. We have already received communications so crude in

thought and loose in expression, that we feel it an injustice to the writers to print them. We want only the results of serious thought. There is a vast difference, as one of our correspondents aptly puts it "between the spontaneous utterance of thought that has ripened till it must burst its shell, and the vain and crude aspirations of fledglings wishing to see themselves in print." THE ACADEMY will not hesitate to publish any thoughtful utterance written in the true teacher's spirit, in the simple desire to awaken thought.

The questions regarding Greek are substantially as follows :

1. How many pupils in school studying Greek ?
2. What was the number ten years ago ?
3. What was the number twenty years ago ?
4. What is the influence of the teacher ? Does he encourage or discourage ?
5. How many pupils study Latin ?
6. How many pupils studied Latin ten years ago ?
7. How many pupils studied Latin twenty years ago ?
8. How many academic pupils in school ?
9. How many academic pupils ten years ago ?
10. How many academic pupils twenty years ago ?

BOOKS RECEIVED.

The criticism or reviewing of books designed for secondary schools will be made a specialty. Such reviews will in no case be made in the interest of any publishing house or of any scheme of methods. They will be the opinions of the manager in cases where no name is signed. Our aim in all cases will be to direct the attention of teachers to the best books, to commend such as from personal use we know to be good, and, in those we have not yet tried in the class-room, to praise the apparent excellencies while unsparingly pointing out what we deem defects. The guiding thought will be that books are made to benefit the reader or student, not the author, and that, while entertaining the kindest of feelings towards those who make books, our duty is rather to those who are to use them. The former deserve our thanks for their efforts, but that should not bias our judgment or dim the keenness of our sight.

[OUR FIRST WORD.—*Academy for February.*]

Atlantic and Pacific Ship-Railway across the Isthmus of Tehauntepec, in Mexico. By Elmer L. Corthell, C. E. January, 1886.

Those Dreadful Mouse Boys. By Ariel. Boston: Ginn & Co. 1886.

A Child's Version of Æsop's Fables, with a supplement containing fables from La Fontaine and Kriloff. By J. H. Stickney. Boston: Ginn & Co. 1886.

The King of the Golden River; a Legend of Stiria. By John Ruskin, M. A. Boston: Ginn & Co. 1885.

We have read this book with delight. We have not at hand just now words strong enough to praise it adequately. Principals are at liberty to write the highest commendation a fairy story can ever deserve and sign our name to it.

The Lady of the Lake. By Sir Walter Scott. Edited by Edwin Ginn. Boston: Ginn & Co. 1885.

We have used this book in the class-room and found it practical. The notes are at the bottom of the page,—an advantage to the general reader, but a disadvantage in the recitation room. The editor has placed before the student, in convenient form, some excellent introductory matter gathered from the best sources. The book makes no pretensions, but it is what it seems, a simple hand-book of a delightful poem; the outcome of a desire to bring good literature to the notice of children, and as such it merits the favor of all teachers.

Algebra Tablet No. 1. Potter, Ainsworth & Co., New York.

This tablet contains some fifty sheets, each with from three to ten examples printed at the top, and to be solved on the blank space below. This idea, though novel, seems to us practical. The first tablet contains exercises beginning with the fundamental rules and extending through lowest common multiple. We shall be glad to learn from the test of the school-room its real value.

Ward's Letter-writing and Business Forms. New York: A. S. Barnes & Co. 1886.

These forms seem specially adapted for use in the higher grades of our grammar schools. In the definite arrangement and classification of the parts of letters, the concise rules for punctuation and the use of capitals, the plan for applying these rules in copying letters, bills and business forms, also in writing from outlines, and the review questions upon finished work, are just what is needed to make our pupils proficient in what is now so much neglected, business writing.

R. B. WHITE,
Principal of Seymour School, Syracuse, N. Y.

Elements of Chemistry, by James H. Shepard, instructor in Chemistry in the Ypsilanti High School. Boston: D. C. Heath & Co. 1885.

It is refreshing to find a book of the grade of Mr. Shepard's written by a man who knows what he is talking about. Students who use this book, as directed by the author, can not fail to get right ideas and a positive interest in the study of chemistry.

Its salient features are:

1. The union of descriptive and qualitative chemistry; this is qualitative work too, not a few hap-hazard "tests" for various substances. For instance, students are directed in qualitative work to analyze drinking water; very valuable results in this are reached by simple means.
2. A practical course of laboratory work which may be followed at comparatively small cost.
3. Full and explicit directions for equipping the laboratory with all needed apparatus and re-agents.
4. A fair statement of chemical theories, although a little more might have been said with profit.

The style of the book is pleasant and calculated to interest beginners. We advise all teachers of chemistry who read the ACADEMY to give the book a thorough examination.

W. G. RAPPEYE,
Teacher of Science, Oswego Normal School.

Greek Inflection; or Object Lessons in Greek Philology. By B. F. Harding, M. A., Teacher of Greek at St. Paul's School, Concord, N. H. Boston: Ginn & Company. 1886. Pp. 44.

This little book proposes a scheme of analysis designed to show in noun and verb both the apparent stem and the termination, and the real stem and the ending.

Opinions will differ as to the advisability of introducing beginners to a system of analysis which on so many points introduces to the pupil the results of comparative grammar, and some perhaps who might feel disposed to use it, will not be able to spare the necessary time. Here and there the author has not made his definitions and explanations sufficiently clear. For example, it does not appear from his definitions of the termination, why in $\iota\chi\sigma\nu'ος$, p. 9, the apparent stem is $\iota'\chi\sigma\nu$, but in $\iota\chi\sigma\nu'σι$ it is $\iota'\chi\sigma$. Again, he does not show why in the form $\lambdaειπειν$, p. 36, "the apparent line" is made to pass through the ϵ , which here represents the radical vowel. And it is hardly correct to call the α of aorists in $-σα$ and perfects in $-κα$ a variable vowel in the sense in which that term is used to designate the ϵ o of the present and second aorist stems. Under section 70, p. 19, an example like $\piολεις$ seems to have fallen out before the comment.

The list of nouns classified according to the termination of the nominative singular in the vowel declensions and the genitive singular in the consonant declensions will be found serviceable, and teachers who may not be inclined to adopt the work for use in the class room may yet value it for helpful hints and suggestions.

Inflection tables for noun and verb are prepared to accompany the work.

F. W. HOWARD, A. M.,

Instructor in Greek, South Williamstown, Mass.

Outlines of Psychology, with special reference to the Theory of Education. By James Sully, M. A., Examiner in the University of Cambridge, etc. Reading-club Edition, abridged and edited, with appendices, suggestive questions, and references to pedagogical works, by J. A. Rhinehardt, Ph. D., Principal of the High and Normal Training School, Paterson, N. J. Syracuse, N. Y.: C. W. Bardeen, Publisher. 1886.

Of all the studies to be made popular by being brought within the capacity and interest of the mass of readers, that of our own minds, Psychology, is the last in order of time, though among the first in importance. Dr. Haven, in his admirable work on Mental Science, mentions two reasons why the study has been neglected; the nature of the subject, and the practical tendencies of the age, thereby indicating two important desiderata in a book that should reach, even to a moderate degree, the masses. The subject must be treated simply and attractively; abstract metaphysical terms must, as far as possible, be omitted, and a connection must be shown to exist between a knowledge of it and the attainment of happiness and success in life.

A careful reading assures us that a long stride has been taken by the author of the original work and the editor of this edition, in popularizing the study of Psychology. In twelve chapters, are admirably treated: *Scope and Method of Psychology; Mental Operations and their Conditions; Mental Development; Attention; Sensation; Percep-*

tion; *Reproductive Imagination (Memory); Constructive Imagination; Conception; Judgment and Reasoning; Feeling; The Will.* Not only are these topics admirably treated, considering the size of the book, but most excellent suggestions and rules are given for the cultivation of the various faculties, e. g., Memory, Imagination, Feeling and the Will. These alone are worth the price of the book. It contains, besides, valuable Appendices after the several chapters, and a good index of subjects and names. It is not the intention of this article to imply that the book is free from defects, nor that it is well adapted for use as a text book, nor that all the phenomena of the mind are fully treated, but that it is an excellent book for use in reading circles and in the home. It should be read by every parent and teacher, by every one desirous of understanding his own mind and how to secure the highest possible mental development and culture.

MILTON J. GRIFFIN, A. M.

Teacher of Mental Science, Syracuse High School.

A History of England. By A. P. Stone, LL.D., Superintendent of Schools, Springfield, Mass. Boston: Thompson, Brown & Co. 1886.

It has been well said that writers on English history usually start with certain beliefs and then seek to give facts tending to establish their pet notions. One feels not the less sure of this on reading (p. 111) "Mary married her cousin Henry Stuart (Lord Darnley). * * * In less than two years Darnley was murdered by a band of conspirators; but there is no proof that Mary was an accomplice in the crime. Soon afterward she married the Earl of Bothwell, a bold and unscrupulous man, who had been suspected of complicity in Darnley's death." We confess that our own studies have led us to opinions widely different from these. So, too, we fail to see why the author makes a distinction between Anne Boleyn and Catharine Howard, both of whom were formally tried, found guilty and executed. "He (Henry VIII) caused Anne Boleyn to be condemned and executed in order to gratify his fondness for Jane Seymour. * * * Catharine Howard was condemned and executed for adultery." Page 105.

Outside of similar points on which our reading has brought us to radically different conclusions, we think the book well adapted to those schools which require a brief but comprehensive view of the subject. The plan of passing rapidly over long periods, and giving special prominence to reigns in which important changes took place, is the only really one feasible in a brief history. The author also does well in devoting much space to the customs of the people and matters of every-day interest.

The prominence given to the history of progress in the ways of living, to discoveries, inventions and improvements, commends the book to every teacher who will go beyond the dry dates of reigns and records of battle and diplomacy. In fact we do not remember ever having found so much available material in this line presented in so small a compass. Of the appendices, "The British Government," and the "List of Works for Reference and Side Reading," form features so valuable that we wonder they have not been introduced in all histories for school use. The general form and appearance of the book are excellent, the maps practical and well-designed.

We think, however, a map giving the present counties of England should have been added.

Since the above was in type, a letter from one of the best teachers in the State, who has used this history in the class-room, speaks in high terms of its practical work in school.

Studies in General History. By Mary D. Sheldon, formerly Professor of History in Wellesley College and Teacher of History in Oswego Normal School, N. Y. Student's edition. Boston: D. C. Heath & Co. 1885.

This is emphatically a new departure in history. Impressed probably with the utterly unsatisfactory results usually obtained in this study the author has striven in an original way to compel students to depart from false and wasteful methods. The book is eminently suggestive. We have spent not a little time in studying it, and unhesitatingly commend it to our fellow-teachers. We find, however, much difficulty in deciding exactly how far it will be practicable in class-room work, and shall be glad to hear opinions from any who are using it. For the classes with whom the author has had to deal, college and normal school students, the plan seems admirable. How far it will suit the more immature pupils in our high schools, it is hard to say; but we do say to every teacher of history, emphatically, get the book and study it; master the plan and use it so far as it fits your school. In any case you can hardly fail to obtain profit greatly outweighing the cost of the book and the time spent in studying it.

History is a study all-important in a country like ours, where the children of the public schools to-day will be the directors of the nation thirty years hence. Its lessons for practical value and bearing on the welfare and advancement of the nation far surpass the boasted progress in arts and sciences; and it is with deep regret that we see history studied by the few and science by the many. The most enthusiastic optimist among us can hardly deny that the tendency to materialize is too strong. We work too much, we reflect too little. Our resources are so vast that we have come to think lessons on economy are unnecessary. Our conquest of natural obstacles has been so rapid and uniform that we forget that not in outward prosperity or material advancement lies the real secret of national or individual greatness.

The teacher of history has then in our school system a special function. Not to cram pupils with dates and dry details, or even to delight them with sprightly anecdote and pleasing pictures; but to show how age after age cause has wrought its effect, how wrong has brought its punishment and error its series of painful consequences, falling on the innocent and on the thoughtless with no less severity than on the malicious and the wicked; how indeed "righteousness exalteth a nation," and how "sin is a reproach to any people." The poorest work we remember ever to have seen done in any school—and we have visited hundreds in different States—was in a class in history—English history at that!

As taught by many to-day history is nearly useless. Taught as it should be it would yield to no study of our courses in practical results. We welcome any book that makes teachers think, no matter if it be not practicable in the class-room of to-day.

ACADEMIC ALGEBRA,

—PREPARED BY—

WEBSTER WELLS, S. B.,

Professor of Mathematics in Massachusetts Institute of Technology.

There has seemed to be an urgent demand for a preparatory book that should be elementary in its character, and yet sufficiently *complete* for any

HIGH SCHOOL OR ACADEMY,

and that it should be arranged by a

PRACTICAL TEACHER OF THE SUBJECT.

It will be found especially strong in those essential features of Algebra which must enter into all the student's future work, and in which so many other texts have been deficient.

WELLS' UNIVERSITY ALGEBRA

is used at HARVARD, CORNELL, PRINCETON, LAFAYETTE and about 100 other Colleges in the United States.

LEACH, SHEWELL & SANBORN,

PUBLISHERS,

87 Franklin St., Boston,

743 Broadway, New York.

PATENTED DEC. 8, 1885.

NUMBER TABLETS

FOR SUPPLEMENTARY WORK IN ARITHMETIC

BY A. W. POTTER, M. S., and T. J. McCONNOR, Ph. D.

NUMBER TABLETS, Nos. 1 to 12, per dozen,	-	-	-	-	-	86
NUMBER TABLETS, No. A,	"	"	"	"	"	45
ANSWERS to NUMBER TABLETS, (pamphlets) per copy,	-	-	-	-	-	12
In preparation, ALGEBRA TABLETS, Nos. I, II, III, per dozen,	-	-	-	-	-	1.26

Each Tablet consists of 50 pages of examples perforated and to be detached and handed in by pupils,—with from 5 to 15 pages of blank paper. Orders for mail shipments must be accompanied by six cents in stamps for each Tablet

These Tablets are so graded that a year's school work is supplemented by two of them, thus giving on an average one Tablet exercise every two days. No more problems have been placed on each leaf than the paper below will be sufficient for their solution; but, if not sufficient, the leaf may be torn at the line of perforation and turned over. Extra leaves to replace soiled pages are bound in the back of each tablet.

LANGUAGE TABLETS.

For Supplementary Work. Arranged for Schools of all grades. In twelve parts, each containing 50 sheets; 50 sheets of from five to ten exercises to be written out on sheet below, which is perforated, to be detached and handed in to the teacher. Nos. 1, 2, 3 are beautifully illustrated with appropriate pictures. No. 1 contains 16 pages of script, expressly drawn and engraved for this series. Nos. 1 to 4 are also ruled on a scale of thirds, like copybooks, with double ruling. Numbers 4 to 12 have single ruling.—per dozen. **\$8.60.**

Wilson's Treatise on English Punctuation, latest revision, per copy, \$1.
 Champlin's Intellectual Philosophy, Gillet and Rolfe's New Works on Physics,
 Dinsmore's Physiology, Webb's New Work Method,
 Dinsmore's Model Script Spelling Blanks.

For complete price-list, sample copies and terms for introduction, please address the publishers.

POTTER, AINSWORTH & CO.,

200 Wabash Avenue,
CHICAGO.

107 Chambers Street,
NEW YORK

22 Bromfield Street,
BOSTON.

Masterpieces in English Literature

BY HOMER B. SPRAGUE.

A new and thoroughly revised edition of this magnificent work is now ready for Schools and Reading Circles. This new edition contains, besides revisions and corrections, *six full-page portraits* of the authors treated, viz., **Chaucer, Spenser, Bacon, Shakespeare, Milton and Bunyan.** Price for introduction and examination, \$1.50.

The **MASK OF COMUS** may be had separately, in Manila Covers, for 20 cents.

Also by the same Author

Shakespeare's Tragedy of Hamlet

[illegible]

This edition of *Hamlet* is fully annotated for class use, and is regarded by eminent teachers as the best edition for school use.

S. R. WINCHELL & CO., Publishers.

30 Franklin Street, Boston.

83 Metropolitan Block, Chicago.

16 Astor Place, New York.

THE ACADEMY.

OUR FIRST WORD.

With cap in hand and a respectful bow, with a little natural hesitation, too, the new comer presents himself at your school this morning. Of his welcome he can only make conjecture. He is country born and lacks the urban graces, but his hands are strong and his heart is in school. He does not ask for charity; he comes to work his way, and only by helping others does he expect to pay his expenses and gain the respect of his companions. By further acquaintance you will judge of his fitness, and, if he is fit, we know you will be glad to keep him.

All figures aside, we propose to conduct a journal for those teaching youth in their 'teens, not forgetting the relation of that work with the earlier work, mindful also of the steps that may follow, but aiming chiefly, by suggestion and mutual aid, to raise the standard of secondary instruction and increase the efficiency of secondary schools.

We shall not treat of the importance of education to the individual or of its effects on the community, or urge the founding of more schools. We have little to say about "methods," popularly so-called, and nothing about the dignity of the profession. We address ourselves not to the public but to teachers, and our motto will be "*Non quid faciendum, sed quo modo,*" not what ought to be done, but how are we to do it? We take it for granted that the trials of one teacher are largely the trials of other teachers, that the remedies are usually within our reach if we were only wise enough to know, and that the success of one ought to lead to the success of all. We shall aim above all to be practical, and if our readers miss the graces of style or search in vain for the grand truths of educational science in these pages, they can easily find them elsewhere. Our province is to remember that it is far easier to learn that children should be trained than to see how to train them, and often a lighter task to master the whole theory of discipline than to persuade a bad boy to be good. Within this field we hope for free inquiry and ready suggestion from fellow-teachers.

The criticism or reviewing of books designed for secondary schools will be made a specialty. Such reviews will in no case be made in the interest of any publishing house or of any scheme of methods. They will be the opinions of the manager in cases where no name is signed. Our aim in all cases will be to direct the attention of teachers to the best books, to commend such as from personal use we know to be good, and, in those we have not yet tried in the class-room, to praise the apparent excellencies while unsparingly pointing out what we deem defects. The guiding thought will be that books are made to benefit the reader or student, not the author, and that, while entertaining the kindest of feelings towards those who make books, our duty is rather to those who are to use them. The former deserve our thanks for their efforts, but that should not bias our judgment or dim the keenness of our sight.

Our work is hardly begun, but many kind words have greeted us. We begin modestly; we are not sanguine, only earnest. We do not expect to be "cumberers of the ground." There are more than half a million pupils and twenty thousand secondary teachers in the country, one-tenth of them in this State. For these we shall work, and, in attempting to represent primarily those of New York, we expect to present no less the wants and wishes of academic teachers throughout the Union.

And so with all frankness we ask for your support, and in all earnestness we purpose to deserve it. If you think we are doing a needed work, help us all you can. If not, let us alone, and we will withdraw from the field when our pledges are redeemed.

In the conditions agreed upon at the Conference of Principals where the Academy had its beginning, it was definitely stipulated that no member of that body should receive any pecuniary benefit from the publication. In this agreement is included the editor and publisher, who will bear all loss, should any occur. All income from the journal, above necessary expenses, will be devoted to increasing its value and scope. Teachers can judge whether, starting under these auspices, the journal is worthy of their support, and subscribers will readily see that, by extending its circulation, they can increase its value and usefulness to themselves. It is, to the best of our knowledge, the only journal issued especially in the interests of secondary education. It is published by teachers, solely in the interest of their work, and is practically co-operative.

THE ACADEMY:

A JOURNAL OF SECONDARY EDUCATION,

DEVOTED TO THE INTERESTS OF HIGH SCHOOLS, ACADEMIES AND ACADEMIC DEPARTMENTS.

GEORGE A. BACON, MANAGING EDITOR. .

VOL. I.

APRIL, 1886.

NO. 3.

A HIGH SCHOOL CABINET AND HOW TO USE IT.

W. A. BROWNELL, PH. D., SYRACUSE, N. Y.

There are two methods of securing and using a high school cabinet of fossils and minerals. One is to get a few thousand dollars appropriated for that purpose by the Board of Education, provided its members are in a liberal mood, and, with this money, buy some beautiful, showy specimens, lock them closely in an elegant case, label them "hands off," and once or twice a term pass the class in geology before them, pointing out the most prominent things, calling them by their Greek and Latin names, and making some profound remarks upon their chemical composition, laws of crystallization, dichroism, &c.

Another method is to secure some hammers and chisels, and, either alone in the fields out of school hours, on Saturdays and during vacations, or with the members of the geological classes, scour the hills, valleys and plains, hunt the quarries, delve into the various mines in the vicinity of the school, and obtain material not only for use in the every day recitation but also for exchange for fossils and minerals in other localities. The material thus secured is to be thoroughly classified and labeled by the teacher, calling on his pupils to assist, in so far as they are able, and then used in the every day recitation; the specimens being passed freely from hand to hand and yet so carefully treated that not a delicate crystal shall be scratched or harmed.

By somewhat extended observation upon the high schools and academies of New York, in nearly all of which geology is supposed to be taught, I feel warranted in stating that not more than one in ten of them has what could consistently be called a geological museum, and of this number more than one-half are employing the "hands off" policy.

Our colleges even are not always lofty models in this matter, and while, probably, all of them have *nominal* cabinets very few have as valuable ones as can be secured by an outlay of a few hundred dollars, accompanied by grit and sweat of the Professor, while some, which are highly favored in this department *financially*, are wofully remiss in their manner of using the valuable collections which they possess.

I once visited the geological cabinet of a college in the State of New York, where, by a liberal outlay of money, had been secured a most admirably selected collection of fossils, ranging through all the geological formations and well illustrating the typical organic forms of every period; where also were cases filled with all the lithological specimens essential for an extensive and careful investigation of the chemical and physical facts relating to rocks, and where an entire story of a noble edifice had been devoted to the uses of this department, and yet I was shocked to learn from students of the college, that this cabinet was merely a *visiting* place for the student, instead of a *working* place, and that, on the average, a student in his four years' course would take a casual look through this collection perhaps three or four times. In fact the college had no Professor of Geology, the one under whose supervision this magnificent cabinet had been secured, having resigned a few years before, and no successor having been appointed.

As I passed through this museum I had a vivid illustration of the "hands off" policy, since by the thick accumulation of dust, which sadly obscured the specimens, one would infer that the cases had been locked several years before, and that the key had either been thrown away or lost.

This is not an isolated case among the colleges of New York; others are very negligent in the use of their cabinets, and, in too many cases, the student throughout his entire course, is neither allowed carefully to examine a fossil or mineral nor disciplined in the least in field work. The study becomes a mere routine for reciting dry facts and theories taken from a book, and when in after years the student finds himself face to face in the fields with rocks of multiplied forms, covered with thousands of mysterious organisms, faulted, tilted, eroded, lifted into grand mountain chains, worn

into deep canyons, crumpled into gigantic synclinal and anticlinal folds, or so changed by dynamical agencies that their original physical features are nearly obliterated and even their chemical composition more or less transformed, he is as unqualified to interpret these things as he would be to decipher the hieroglyphics of the ancient Egyptians. I recently heard two college graduates of fine attainments, who are making their mark in prominent literary work, and who have strong likings for the physical sciences, state, with sincere regret, that during their entire student life they never had impressive ocular demonstration of the fact that rocks contain fossils, and that when, after graduation, they began looking closely and finding the the wonderful forms with which rocks abound, it was to them a strange revelation.

The method of teaching which secures such results is utterly wrong, and it is a comparatively easy matter for every live teacher of geology to adopt an entirely different one. To make this article practical I will show how every high school and academy may obtain a valuable, working cabinet, even where no funds to any great extent are appropriated for this purpose.

Having had personal experience in building up a cabinet of this character, it may be best for me to state my plan of working. When I entered the high school of Syracuse, N. Y., fourteen years ago, its cabinet of fossils and minerals was merely a fortuitous accumulation of a few scattered things mostly without labels, without classification, and of little practical value in class-work.

At my earliest opportunity I made a careful survey of our county so as to ascertain where I could most profitably take my classes on excursions, and where, during my vacations and on Saturdays, I might make collections to use in exchange with scientists of other localities.

The county was found to be entirely underlaid with sedimentary rocks belonging to seven distinct geological periods and succeeding each other in regular order from the oldest to the newest, as one proceeds from north-east to south-west across the county. The dip of the formations being about thirty feet to the mile, caused the older layers successively to disappear under the next later, while various deeply eroded valleys enabled one readily to trace the order of succession of the various periods.

The oldest formation was of the Niagara Period, Upper Silurian Age, and in it, in addition to its characteristic fossils, our classes often found beautiful calcite and dolomite geodes. By extending our trips into adjacent counties we obtained many fossils which did not appear in our immediate vicinity. Next above the Niagara was

the Salina, one of the mineral products of which has contributed materially to the wealth of our city. Here although we found fossils but rarely, still we were richly compensated for their absence by the abundance of beautiful transparent selenite, snowy gypsum, and casts in clay of salt crystals which were once included in these rocks, but which are now dissolved from all that portion which lies above the drainage of the region, leaving these sharply molded clay casts as mute witnesses of their past existence.

Rising above this formation is the Lower Helderberg Period, the Waterlime group of which is the only division found in our county. Here we obtained not only the typical fossils of that group, but also, in certain localities, met with geodic cavities, lined with delicate purple crystals of fluor spar, sometimes also associated with calcite and quartz crystals. In some places our classes find deep, vertical fissures in this Waterlime, into which water has percolated, charged with limestone in solution, which it has deposited, sometimes in mass, sometimes as double refracting Iceland spar, sometimes as dog-tooth spar, and sometimes as nail-head spar.

If Aeneas, while looking out upon the wreck of his vessels, as described by Virgil, in the Aeneid, could see *gaza undique*, much more the geologist, who looks out upon the beautiful crystals and fossils now imbedded in the sediments of this ancient sea, can behold rich treasures on every hand. Each and all of these are laid under contribution to add to the spoils which our amateur geologists transport to our high school museum.

Immediately succeeding the Lower Helderberg is the Oriskany sandstone, the last period in the Silurian Age, and, in some portions of our county, its coarse red sandstone layers are directly superposed upon the fine grained limestone rocks of the Lower Helderberg, affording evidence of the extremely sudden change of sediments which occurred in the Palæozoic seas which formerly covered our continent.

Here also our classes luxuriate in fossil gathering, and scarcely a cubic yard can be found that does not, either upon its surface or within its mass, disclose organic remains. Where the rock has been weathered and the iron, which abounds in it, has been oxydized so as to open its pores to the action of infiltrated water, the shells of the fossils have been dissolved, leaving sharply defined casts of the interiors; but where the iron has not been oxydized, the rock is impervious to water and the imbedded fossil shells remain intact. Both of these conditions are displayed to the classes, as they ply their hammers and chisels, and afford abundant stimulus for thought and speculation as well as valuable material for the growing cabinet.

Another point of interest in relation to this Oriskany sandstone is, that while it is thirty feet thick in the western part of our county, it gradually grows thinner eastward until it finally disappears, leaving the Waterlime below it, and the Corniferous limestone above it, in juxtaposition. The classes are thus enabled to trace the outlines of the ancient ocean in which this sandstone was deposited, and to see that its border was near the eastern boundary of our county while it deepened westward. The enthusiasm with which a class of young gentlemen and ladies will search out the borders of such a Palæozoic sea is truly refreshing, and the superiority of the knowledge thus gained, over that obtained exclusively from text-books, is very marked.

Rising above the Oriskany sandstone is the Corniferous limestone which, in our county, is a thick deposit and contributes largely both to the fertility of our soil and to the value of our mineral products. The student is now interested to remember, from the classification of his text-book, that he has not only changed in his geological *period* but also in his geological *age*, and that while, during all the other periods which he has found in the county, he has been in the Silurian Age, he has now passed into the Devonian Age.

The fauna of this Corniferous period he finds to be very abundant and varied, and he learns the additional fact that to separate the fossil forms from the compact imbedding rock is a much more difficult task than he would imagine were he to consult his text-books only. Indeed many of the forms must be studied in the fields, for it is practically impossible to remove them in a perfect condition. Corals abound here in forms as various as those off the present coast of Florida, crinoids large and small, trilobites, brachiopods, lamellibranchs and gasteropods, are seen scattered about in rich profusion.

In this formation the student enjoys a very favorable opportunity for studying the chemical agency of the air in transforming rocks, for in many places iron sulphide may be seen changing into iron oxide, and occasionally a cyrtoceras, a crinoid or perhaps a trilobite, fossilized in beautiful iron pyrites, may be seen thus oxydized and disintegrated.

The chemical action of *water* upon geological formations is also finely displayed here, since limestone is soluble in water charged with carbonic anhydride. The waters which fall upon the earth, becoming charged with carbonic anhydride from the decomposing vegetable matter through which they pass, percolate through the underlying limestone, dissolving out extensive caves and, issuing from the base of the hills into the adjoining valleys, deposit their

burden of dissolved limestone in great accumulations of travertine, incrusting twigs, leaves, stumps, roots and trunks of trees, producing most interesting and beautiful specimens for our amateur collectors.

The caves thus formed may in some cases be explored, while in other instances they give evidence of former existence by a depression of the superincumbent mass of earth and rocks, forming sometimes most beautiful circular lakes. Another point of interest about these rocks is the fact that, being very compact and durable, they have retained perfectly the smoothing and grooving which they received during the glacial period.

Wherever the melting glacier deposited its debris of pulverized rock upon them, so as to protect from surface erosion by water, they present finely polished surfaces as mementoes of the ice masses which once slowly moved over them. It is interesting to observe a class of students speculating upon the probabilities of finding a smoothed surface underneath a mass of earth, basing their expectation upon the fact that all the earth above the rock, as they see it cropping out from the side of a valley, is composed of glacial deposit and hence the surface of this rock must have been the basis on which the glacier moved, and then, after having advanced their opinion, to see a delegation from the class remove the earth from a portion of the surface while others stand about eagerly watching for the disclosed rock. A scream of delight and satisfaction from the ladies announces that the surface is found to be smoothed and that their theorizing was based upon a solid foundation.

The classes return to their books from such a trip with a more favorable opinion of the theories which they study, relative to rocks, and henceforth they regard theories not as wild fancies of some speculative brain, but as rational explanations of what, from the nature of the case, can not be absolutely proven.

The students do not fail to notice in this Corniferous limestone the masses of hornstone or flint, which gives name to the period. This hornstone, like the flint in the chalk formation of England, is the product of microscopic plants and animals which have the power of secreting silica from the water in which they exist. While this silica has not taken the beautiful geodic forms which it has in the Sub-carboniferous period of the Western States, still it often incloses fossil forms which are both interesting and instructive.

Immediately overlying the Corniferous limestone is found the Marcellus shale, a division of the Hamilton period. This shale is quite full of vegetable matter, which has thoroughly blackened it, and in former years much money was spent in vain endeavors to find coal

in it in workable quantity. It does not afford the class many fossils except in a very few layers, still it displays throughout its entire mass flattened, circular concretions, known as septaria, and these occasionally inclose a mineral or an organic form which seems to have been the nucleus about which the septarium concreted.

When the class, however, pass out of this formation into the Hamilton group, which lies directly above it, they are fairly bewildered with the number and variety of fossils which surround them. Rich as have been the layers in some other groups in the county, this group beggars them all in its prolific organisms.

Among the forms which our pupils most eagerly collect are the peculiar trilobites with prominent eyes, the lenses of which are as distinct as those of animals now living. In no other group throughout the entire range of geological history, are so perfect eye lenses found, and here two varieties of trilobites abound, possessing these lenses in a high state of preservation.

This formation covers the southern half of our county and constitutes the latest of the periods within easy reach of our school. These formations which I have named constitute our *field* text-book, and our pupils never flag in deciphering the hieroglyphics upon its pages. To this they go from their *printed* text-book to corroborate its statements and from this they return to their books with ever renewed zeal and enthusiasm.

Within the range of these periods, the Niagara, Salina, Lower Helderberg, Oriskany, Corniferous and Hamilton, they find an epitome of the entire realm of physiographical, dynamical, lithological and historical geology, if we omit the topography of upheaved mountain ranges. Here rocks are represented in every stage of consolidation, from fine grained compact limestone, through coarse grained sandstone to shale so loosely aggregated as to be easily removed with a spade, while the streams of water that flow over them have, by virtue of the difference of rapidity with which they wear such diversified rocks, formed numerous gorges, cascades and rapids, presenting many problems to be solved with reference to dynamical agents.

The abundance and variety of fossils open up a vast field for classification and for observing the transformations and successions of life from one period to another, and we have arranged in our cabinet, from these rocks, several thousand forms ranging through many genera, species and varieties, all named, labeled and classified upon our shelves. With these, as a nucleus, we have made exchanges with geologists and mineralogists in nearly every State of our Union and in various parts of Canada and Europe, by which means we have

secured *some* representatives from every geological period throughout all geological time, our only expense in cash being the cost of freight. During vacations trips have been made to more distant localities and from Colorado, Kentucky, Pennsylvania, Ohio, Massachusetts, England, Wales and Scotland, various fossils and minerals have been taken from the fields, shipped to our cabinet and subsequently classified, labeled and arranged. The work of filling up gaps is continually going on, and every term sees valuable additions made.

The fossils of each period are ranged in regular sequence so that the pupils may begin at the Archæan age and, by a direct passage about the room, may examine each period to the time of man. During the recitation hour specimens are passed from hand to hand for comparison with the statements of the text-book.

Duplicate specimens, without labels, are used in reviews and examinations until the pupils become somewhat expert in identifying and classifying both minerals and fossils. One result of this system is that nearly every member of the class, however dull in general, becomes quite an enthusiast in this department, and in some instances quite listless pupils have been awakened to study and application by the attractiveness of this natural method.

Another result is that in nearly every class will be found some who have peculiar aptness and liking for this branch of science, and, by becoming acquainted with the methods of classifying rocks and fossils as well as having experience in collecting them, they are led to pursue the subject, more or less, at their leisure after graduation. Several amateur collections have been made by our graduates since this plan of instruction was adopted. No teacher need hesitate in his efforts to familiarize his pupils even with the long scientific names of fossils, so long as he permits a free and frequent use of specimens, for the name often depends upon some prominent characteristic of the fossil, and this will ever become a reminder of the name.

For instance, suppose it desirable to familiarize a pupil with the name of the trilobite, *Odontocephalus Selenurus*. If he were to learn this name arbitrarily from a book it would be a laborious task, and, even if accomplished, would be very soon forgotten. But place this trilobite in his hand and turn his attention carefully to the fitness of the name and it will ever after be more easily remembered.

He notices that the trilobite has a head fringed in front by an appendage which resembles a row of teeth. He can now be informed that the Greek stems *οδοντ-*, meaning tooth, and *κεφαλα-*, meaning head, have been put together to make the word *Odontocephalus* which is the generic name of his specimen. He is next di-

rected to the tail of the trilobite which he sees is in the shape of a half moon. Looking at the specific name of his fossil he sees it to be made up of the Greek stems, *σεληνα-*, signifying the moon, and *ουρα-*, meaning a tail. The strange name then, *Odontocephalus Selenurus*, means simply Moon-tailed Tooth-head, and the peculiar form of this trilobite will ever after suggest the name. This is a fair sample of the adaptation, in general, of names in Palaeontology and I find no difficulty in familiarizing pupils with them. Of course frequent repetitions and reviews are necessary, but it is surprising how soon the names will be mastered when the specimens are at hand. A little pride can easily be awakened with reference to remembering these names by making each pupil give the name to his neighbor as the fossil passes from hand to hand.

In a similar manner the names of minerals may be familiarized, and when any doubt arises as to the exact character of a mineral, the student may easily be shown how to set all questions at rest by the use of his blow-pipe and chemical reagents. When our academic schools have Geology and Mineralogy taught with the use of actual specimens, instead of casts or pictures, an important revolution will be secured in this department.

THE ROYAL HIGH SCHOOL OF EDINBURGH.

On the southern slope of Calton Hill, looking out over Holyrood Palace to the Salisbury Crags and Arthur's Seat, with the castle in view to the west and the Pentland Hills in the distance, stands the Royal High School of Edinburgh. Although the institution traces its origin back through successive changes to the school at Holyrood Abbey, and the time of David I., not a few men still walk the streets who saw Lord Glenorchy lay the corner stone of the present building in 1825. Nothing in "Modern Athens" reminds one more vividly of the ancient Acropolis than this school-house. In the middle of the front, a Doric portico, hexastyle with a double range of columns, copied in its general proportions and even in minutest details from the famous temple of Theseus, projects far out from the main façade. On either side extend peristyles of six smaller columns, pure Doric with corresponding entablatures, and at each extremity of the building are rows of still smaller columns in front of the wings.

The entire length of the main building is nearly three hundred feet, and the wings add a hundred and fifty more. A hall in the mid-

dle, seventy-five by forty-three feet, extends to the roof. It is a perfect amphitheatre, the seats rising tier above tier on every side. There are galleries, too. The library and rector's class-room also extend the entire height of the building, but in the other parts it is divided into two stories, thus giving additional class room for the various masters.

If this article were intended for the general reader, I should be glad to dwell on the history of this famous school, on the great men, teachers and pupils, who have studied here. Before me, at this moment, lies a fac-simile written in a straggling boyish hand by the fingers that afterward penned *Waverley* and the *Lady of the Lake*. Scott was only eleven years old when, in 1783, he wrote for a school composition:

"TO DR. ADAM; ON THE SETTING SUN.

Those evening clouds, that setting ray,
And beauteous tints, serve to display
Their great Creator's praise;
Then let the short-lived thing called man,
Whose life's comprised within a span,
To him his homage raise.
We often praise the evening clouds,
And tints so gay and bold,
But seldom think upon our God,
Who tinged these clouds with gold."

In the manuscript catalogue of the high school library the reader's signature is placed opposite each entry, and is with no common interest that one sees the boyish writing of Brougham, Blair, Jeffrey, Cockburn and Elphinstone, opposite the sturdy tomes they plodded through. Scott's name is opposite every book of voyages or travel that the library could boast, and not a little of its history.

My purpose, however, is rather to speak of the school of to-day, and from the pedagogue's view-point.

The year begins October 1st, and closes July 22d (approximately). The day comprises six periods, 9:10 to 10, 10:05 to 10:55, 11 to 11:45, 12:15 to 1, 1:05 to 2, 2:05 to 2:55, and school is daily opened with the reading of the scripture and with prayer.

The course of study extends over seven years, and there are therefore seven classes. For the first class no limit of age is announced, and "no more is required than that the pupil be able to read a passage of plain English with ease, and perform correctly easy sums in the simple rules of arithmetic." For admission to other classes the rector examines and places the pupil.

In the first class the programme includes English, Arithmetic and Latin.

Under English the pupil has Epochs of English History, to 1016 A. D., Geography of Europe, England and Scotland, with map-drawing, Grammar, Sixth Reader (Chamber's), Spelling (oral and dictation), Bible Lessons (Genesis with the Geography of places).

Under Arithmetic, simple and compound rules, weights and measures, reduction, simple proportion. Under Latin, Abbott's *via Latina*, accidence to the end of irregular verbs; exercises 1 to 30.

The second class adds French, and continues all the other work. Reading Latin is begun, English History advances to Edward II. I. Samuel takes the place of Genesis. Arithmetic proceeds through fractions and compound proportion, Geography through Asia and Africa.

In the third class all these studies are continued, but at this point a certain separation begins. There is now a "Classical Side" which adds Greek, and a "Modern Side" which adds German. Book II. of Cæsar's Gallic War and sixteen pages of Ovid are read by all, and the principles of pentameter and hexameter verse are studied. English History is brought down to James I. Geography takes up the Western Hemisphere. Scott's Marmion is read. English language is formally studied, and composition work begins by paraphrasing, letter-writing and short essays. The Bible lessons are Luke's Gospel, with Geography of the places. Arithmetic takes up decimals, interest and square root.

This work is done by all. In addition to this, German is taken by the modern side, Greek by the classical.

From the fourth class upward, English, Latin, French and Arithmetic, or Geometry in advanced classes are treated, as common subjects, useful and necessary as a mental training to all alike. The modern side thus has the stimulus of working with those receiving full classical training. The classical side continues Greek with German as a minor study, and begins Algebra. The modern side on the other hand has German one hour daily, together with penmanship and either Algebra or Philosophy. This latter course is one year shorter than the classical.

In this article special notice is taken of the classical side, because here have been trained the men who have made the school famous. From the fourth year the course on that side is given entire. Up to that point the general character of the work has been already indicated above.

FOURTH CLASS.

LATIN.

VIRGIL.—*Eclogues*, I., III., IV., V. and VI.

SALLUST.—*Jugurtha*, Chaps. 32-80.

LATIN COMPOSITION.—Selected Exercises.

LATIN GRAMMAR.—Revised. Irregular Nouns, Adjectives, and Verbs. Rules for Gender.

GREEK.

SMITH'S *Initia Græca*. The Accidence, to end of Verb, with Exercises.

NEW TESTAMENT.—*St. Mark*, Chap. I.

CARMICHAEL'S *Extracts*, 1-30.

ENGLISH.

Epochs of History, MACMILLAN'S.—William III. to early part of the reign of George III.

MACKAY'S *Intermediate Geography*.—England, Ireland, France, Belgium, Holland, East Coast of North America.

GOLDSMITH'S *Traveller* and *Deserted Village*.

Grammar and Analysis. Exercises in Paraphrasing.

SCRIPTURE.—*Acts of the Apostles*.

FRENCH.

DE FIVAS' *Grammar*.—From p. 106 to end of Irregular Verbs.

Reader (High School).—Pp. 56-100.

French Composition.—Exercises on the subjects studied in the Grammar. *French Manual of Conversation*, etc.—Lessons 21-49.

GERMAN.

RAVENSBERG'S *German Grammar and Exercises*.—1-36, including Rules indicated.

RAVENSBERG'S *German Reader*.—Pp. 1-13, and some Poetry.

MATHEMATICS.

EUCLID.—HAMBLIN SMITH'S, Book I., with numerous deductions.

ALGEBRA.—To the end of Simple Equations.

ARITHMETIC.

Simple and Compound Proportion, Practice, Fractions, Decimals; Simple and Compound Interest, Present Worth and Discount, Stocks, Profit and Loss, Square Root and Mental Arithmetic.

FIFTH CLASS.

LATIN.

HORACE.—*Odes*, Book I.

CICERO.—*De Senectute*.

LIVY, Book XXI., Chaps. i.-xx.

BRADLEY'S *Arnold*.—Exercises 1-32. (Exercises in Class.)

Latin Grammar. Latin Composition.

History of Rome to end of Second Punic War.

GREEK.

SIDGWICK'S *First Greek Writer*.—Exercises 1-20.

Greek Grammar.—Revised.

XENOPHON.—*Memor.* I. i.-iy.

HOMER.—*Odyssey*, Book VI.

NEW TESTAMENT.—*Acts of the Apostles*, Chaps. I.-IV.

ENGLISH.

SHAKESPEARE.—*Macbeth*.

Essays and Grammar.

Scottish History to James I. inclusive. MACARTHUR'S *History of Scotland*.

Outlines of Early English History.

FRENCH.

MME. DE WITT.—*Derrière les Haies*.—Beginning, to page 31.
 DEFIVAS' *Grammar*.—Syntax—Beginning, to page 297.
 SOUVESTRE.—*Un philosophe sous les Toits*, pp. 22-54.
 COMPOSITION.—Exercises on the subjects studied in the Grammar. BLOUET'S
French Composition, Nos. 1-32.
 DICTATION, etc.

GERMAN.

German Grammar, and *Conversational Exercises*, 41-70, including Rules indicated.
 RAVENSBERG'S *German Reader*, pp. 9-36; also some Poetry.

MATHEMATICS.

GEOMETRY.—HAMBLIN SMITH'S *Euclid*. First six Books, with numerous Geometrical Deductions.
 ALGEBRA.—HAMBLIN SMITH'S *Algebra*, to the end of Quadratic Equations.

SIXTH CLASS.

LATIN.

HORACE.—*Satires*, Book I., v. to end of book. *Odes*, Book IV., and *Carmen Seculare*.
 TACITUS.—*Agricola*.
 TERENCE.—*Andria*.
 VIRGIL.—*Aeneid*, II.
 Latin Prose Composition. Exercises in Elegiac Verse. Unseen Translations.
 Roman History as in Seventh Class.

GREEK.

PLATO.—*Phaedo*, Chaps. I-II, and 63 to end.
 HOMER.—*Iliad*, XIX.
 EURIPIDES.—*Hecuba*.
 Greek Prose Composition. Unseen Translations.
 NEW TESTAMENT.—*Ephesians*, *Philippians*, *Colossians*.
 GREEK GRAMMER, revised.
 History of Greece to end of Peloponnesian War.

ENGLISH.

STOPFORD BROOKE'S *History of English Literature*.—To Chaucer inclusive.
 CHAUCER'S *Canterbury Tales*.—The *Prologue*, the *Knights Tale* to line 1022.
 Translations in Prose of Passages from Chaucer.
 English History to 1295.

FRENCH.

DE FIVAS' *Grammar*.—Syntax of Verbs, Participles, Adverbs, Prepositions, and Conjunctions. All the Irregular Verbs learnt.
 MME. DE WITT.—*Derrière les Haies*, pp. 1-65.
 SOUVESTRE.—*Un philosophe sous les Toits*, pp. 22-71.
 DICTATION, etc.
 COMPOSITION.—Exercises on the subjects studied in the Grammar. BLOUET'S
French Composition, No. 68 to end of first part, and to end of No. 5 of second part.

GERMAN.

RAVENSBERG'S *German Grammar*.—Exercises 41-70, including Rules.
 CHAMISSE.—*Peter Schlemihl*, Chaps. I.-V. inclusive.

MATHEMATICS.

EUCLID.—First six Books. Numerous deductions.
 ALGEBRA.—HAMBLIN SMITH'S *Algebra*.—To the end of Progressions.
 TRIGONOMETRY.—HAMBLIN SMITH'S *Trigonometry*.—The more elementary portions.

SEVENTH CLASS.

LATIN.

TACITUS.—*Annals*, III., the whole.

VIRGIL.—*Georgics*, II., 259 to end.

HORACE.—*Epistles*, Book II., the whole.

CICERO.—*Pro Sestio*, the whole.

JUVENAL.—*Satires*, I., III., X.

Latin Prose Composition, Unseen Translations, Latin Verse Composition. *Elegiacs and Sapphics*.

Roman History from the Foundation of Rome to the Gracchi.

GREEK.

HOMER.—*Iliad*, I.

DEMOSTHENES.—*De Corona*.

SOPHOCLES.—*Philoctetes*.

THEOCRITUS.—*Idylls*, I., X.

THUCYDIDES.—VII., 1-70.

Greek Prose Composition, Unseen Translations.

ENGLISH.

STOPFORD BROOKE'S *English Literature*.—To Chaucer inclusive.

PALGRAVE'S *Golden Treasury of Songs and Lyrics*. Those illustrative of 19th century Poetry.

CHAUCER.—The volume of Clarendon Press Series, entitled *Man of Lawe*.

SHAKESPEARE.—*Merchant of Venice*, Acts I., II., III.

History of England to 1295. BRIGHT.—Vol. I. GREEN'S *Short History*. STUBBS' *Early Plantagenets*.

FRENCH.

CORNEILLE.—*Le Cid*.

MOLIÈRE.—*Le Bourgeois Gentilhomme*.

XAVIER DE MAISTRE.—*Voyage autour de ma chambre*.

COMPOSITION.—*Blouet*, Nos. 68 to end of first part, and to 6 of second part.

Dictations, Conversations, etc.

MATHEMATICS.

Same as Sixth Class, with the addition of a Complete Course on Trigonometry, Elementary Statics, and Dynamics—one part of Class taking SALMON'S *Conic Sections*, Modern Geometry, including Theory of Transversals, Reciprocal Polars, etc., Logarithms, including the Theory.

Among the points in which this course differs radically from most of our courses, we notice first the small portions read in any one author. Few of our high schools in three or four years read less than six thousand lines of Virgil, but in this seven years course only one book of the *Æneid* is read, with a few lines of the *Georgics*, and five *Eclogues*. We find, too, here but one oration of Cicero with the *De Senectute*, and one short book of Cæsar. On the other hand are portions of Sallust, Ovid, Terence, Horace, Livy, Tacitus and Juvenal, with four years constant practice in Latin composition. The same is true of Greek.

Another noticeable thing is the prominence given to what we call English Literature.

Additional light is usually thrown upon any course of study from a knowledge of the character of the examinations. In Latin and Greek the examinations at Edinburgh do not differ materially from

those given at good schools among us, except that less importance is attached to technical grammatical work and more to writing Greek and Latin and to sight translations. In all the examinations I have seen the word *parse* does not once occur. In English, however, the examinations indicate that especial attention is given to work often neglected in our best schools. We give below specimens of English examinations from the fifth, sixth and seventh years.

The examinations in mathematics fully bear out the impression one gets from the course of study, that that branch is pursued far beyond the requirement of American schools, and close observation of the boys fully impresses one with the obvious advantages of the system in securing mental discipline.

Science teaching, except physiology, is entirely ignored, but Scripture study is regularly required through six years.

Of the age of the pupils I regret to say that I can only make conjecture. The average seems decidedly younger than in our high schools, the first class seeming from nine to ten, and the seventh from sixteen to seventeen.

Tuition in the regular courses is paid quarterly amounting in the

First class to	\$55.00	a year.
Second "	60.00	"
Third "	65.00	"
Fourth "	70.00	"
Fifth, sixth and seventh classes to	75.00	"

Special rates are charged for optional branches like drawing, fencing, shorthand and Hindustani (taught for the benefit of those preparing for the India Civil Service Examinations).

The whole number of pupils is between three and four hundred.

On the important matter of teachers' salaries I am in utter ignorance.

The Rector is a middle-aged Yorkshire man, a graduate of Edinburgh and Oxford. With him are associated four other classical masters, three English, one French, one German, three mathematical; besides instructors in penmanship and book-keeping, drawing, shorthand, fencing, gymnastics, swimming, physiology and Hindustani.

This paper would hardly be complete without some reference to the extraordinary prize system so prominent in many of the old schools. I stood last summer at the closing exercises of a Merchant Taylors school in Edinburgh while the Bailie gave out hundreds of prizes—medals, books, bursaries, scholarships, varying in value from a few shillings to one hundred pounds. Rewards of excellence in Classics, English, French, Mathematics, Athletics, what not! I re-

member mainly that the boy who won the highest prize, £100 for general scholarship, was one of four to win the prize at team rifle shooting from all the competing schools. The prize system hardly commands the approval of the most thoughtful educators in Britain, but it is a time-honored custom little likely to disappear in this age.

ENGLISH.

CLASS V. CLASSICAL.

(Time allowed—Two Hours.)

1. Explain the following expressions:—*his penthouse lid; posters of the sea and land; the insane root that takes the reason prisoner; there's husbandry in Heaven; our fate, hid in an auger-hole, may rush and seize us; if trembling I inhabit then, protest me*, etc.

2. Render in your own words, at what length you think proper, the meaning of the following passages:—

The flighty purpose ne'er is overtook
Unless the deed go with it; from this moment
The very firstlings of my heart shall be
The firstlings of my hand.

Nought's had, all's spent,
Where our desires are got without content:
'Tis safer to be that which we destroy
Than by destruction dwell in doubtful joy.

3. Describe the occasions on which Macbeth encountered the Witches, what they said to him, and what influence their words had on his conduct.

4. Give the outline of the plot of *Comus*, quoting by the way any passage that has particularly impressed you.

5. State what you know about Caxton, Surrey, Marlowe, and their writings. Also about the circumstances of play-acting—the theatres, the audience, the mode of representation—in Elizabeth's reign.

ENGLISH.

CLASS VI. CLASSICAL.

(Time allowed—Two Hours.)

1. Translate and explain the following passages, mentioning if you can in what context they occur;—

The reule of Seynt Maure or of Seynt Beneyt,
Bycause that it was old and somdel streyt,
This ilke monk leet olde thinges pace,
And held after the newe world the space.
He wolde the see were kept for eny thinge
Betwixe Middleburgh and Orewelle.
Io termes hadde he caas and domes alle,
That fro the time of Kyng William were falle,
Thereto he couthe endite, and make a thing.
Ful many a draughte of wyn hadde he ydrawe
From Burdeux ward while that the chapman sleep.
Right as the Friday, sothly for to telle,
Now it schyneth, now it reyneth faste,
Right so gan gery Venus overcaste
The hertes of hire folk, right as hire day
Is gerful, right so chaungeth she array.

2. Give the meaning and the derivation of the following words in italics :—a forneys of a *leede*; him were *leeve*; playen on a *rote*; his *chevyssaunce*; his *purchasyng* mighte nought ben *enfecte*; she hadde such an *haunte*; a *lewed* man; took by *taille*; to the *launde* he rideth.
3. Describe the Marchaunt, the Frankeleyn, and the Reeve.
4. Give an outline of the Knight's Tale.
5. Sketch the career of Thomas Becket and Simon de Montfort.

ENGLISH.

CLASS VII. CLASSICAL.

(Time allowed—Two Hours.)

1. Translate the following, with such notes as would make the meaning plain to a modern Englishman :—

(a.) Ac Symonye and cyuile - and sisoures of courtes
 Were moste pryue with Mede - of any men, me thoughte.
 Ac fauel was the first - that fette hire out of boure,
 And as a brokour broughte hir - to be with fals enjoined.
 Whan Symonye and cyuile - seigh here beire wille,
 Thei assented far siluer - to sei as bothe wolde.

(b.) Ac thanne cared thei for caplus - to kairen hem thider,
 And fauel fette forth thanne - folus ynowe;
 And sette Mede vpon a Schyreue - shodde al newe,
 And fals sat on a sisoure - that softlich trotted,
 And fauel on a flaterere - fetislich atired.

(c.) Freres with faire speche - fetten hym thennes,
 And for knowyng of comeres - coped hym as a frere.
 Ac he hath leue to lepe out - as oft as hym liketh,
 And is welcome whan he wil - and woneth wyth hem oft.
 Alle fledden for fere - and flowen into hernes,
 Saue Mede the Mayde - na mo durst abide.
 Ac trewli to telle - she trembled for drede,
 And ek wept and wronge - whan she was attached.

2. Sketch the career of Lady Meed, explaining the points of the allegory.
3. Compare Chaucer's treatment of ecclesiastical and other corruption with Langland's, giving instances where they touch upon the same vices.
4. Explain fully the questions at issue between Charles I. and his Parliaments.
5. Give some account of Prynne, Sir John Eliot, Pym, Hampden, Falkland.

HOW FAR CAN LITERARY AND RHETORICAL WORK BE CARRIED IN THE HIGH SCHOOL?

PRINCIPAL ELIOT R. PAYSON, BINGHAMTON, N. Y.

No high school graduate ought to make any serious errors in the punctuation, grammar, or capitalization of an ordinary letter. It is equally inexcusable for him to make grave or frequent blunders in pronunciation. On this we all agree. But this is not enough. Whenever and wherever called upon, whether in Chautauqua circle, reading circle, or on any of the thousand and one occasions on which the man or woman doing active work in the world is expected

to express himself, the high school graduate ought to appear to good advantage. It is his shame if he appears illiterate. He should always be able to utter his thoughts respectably, if not forcibly. No boy can tell when he may have to say something before his fellow-citizens or write something for their benefit after he gets at his world-work, and when such an opportunity does arise, the early training of the school ought to be a help. This is one object which should be kept in view in the literary and rhetorical work of the high school. Eliminate all this work from the curriculum and what would be the result? Would the schools be better, or worse? Suppose this to be done in every such school in our State for fifteen years to come. What a generation would be reading our papers and writing for them, making laws to govern us, editing our school-books, carrying on our work in any and all branches that require a knowledge of letters! As it is, there is none too much literary culture. Too much trash is read, too many ridiculous speeches are made, too much havoc wrought with the mother-tongue. That the schools would thus be made more attractive, few would venture to assert. Groan as they may over a composition to write or a "piece" to speak, not many of the young people would really want these things left out. They think the others ought to do them, at least. The "exercises" give a spice to the ordinary routine.

Taking a more subjective view, the high school ought to do something to cultivate the satisfaction and pleasure which possess one who feels that he can appreciate and enjoy the best thoughts of the best authors. Academic students may not always mount to the upper ether of literary accomplishments or delights, but it is sad indeed to leave them struggling in the *spissus aer* of low taste or inferior literature.

Now, all the sciences, the mathematics, the Greek or the Latin grammar, will not prevent the youth from reading trash. All this will not make them see the vast gulf between the novel of Augusta Evans and that of George Eliot, or between the rhyme of "Flying Jim's Last Leap" and the poetry of Longfellow's "Voices of the Night." To accomplish this they must have time, advice, training, and that too in no stinted measure. To enable the minds of the young to distinguish tinsel from gold, to make them instinctively discard the one and just as instinctively choose the other, this is the great aim, or should be the great aim of the literary and rhetorical work in an academic course. In this direction it ought to tend. And when we ask how far it may be carried, we may answer, in general terms, it may and usually can be carried far enough to make a decided impression. This cannot be done in a day, very likely not

in a year. Let us hope that it will be attained before graduation day. Certainly it is not likely to come on the principle of "half-time in schools," which has lately been advanced in certain quarters with more zeal than knowledge. Every school ought to have direct drill in literature and rhetoric. There is no more profitable study than the study of our English tongue. None is pleasanter, both to instructor and instructed. No classes are more enthusiastic. None are remembered in after years with more pleasure. There should be a system in it all. It is just as unwise to scatter the forces here as in any other work. It should be regular and constant. With a definite object and a regularly systematized course of instruction through the four years of the curriculum, results can be accomplished that would surprise any one who had not given the subject particular attention.

We are told that children must be brought in contact with things. They must learn through the senses. They must see and touch things. The idea is repeated and reiterated *ad nauseam*. It may be true enough. No one cares to deny it. But they need to be taught how to *think*. A very good way to do this is to show them how others think and have thought. At the age when they enter the high school they are ready to take and appreciate much more than we are apt to expect. The literary work should begin at once. Suppose that we have a weekly recitation in American authors. It needs no text-book. Supply encyclopædias. Bring into the school-room all the works of each author under consideration that can be obtained. Require an account of his life and an extract from his works. Besides that, require each boy and girl to read one book a month and report on the same. Under the guidance of a skillful teacher there is almost no limit to the good that may thus be done. An impetus may be given that will last long after many other school affairs have faded entirely from memory. And in such a class there is room for the exercise of all the teacher's personality. The personal element is always powerful. Its power is nowhere more evident than here. We sometimes get tired of the routine of the arithmetic and algebra. Here is a relief. Suppose you are asked what book of Hawthorne's is best to be read this month. How much does a thorough preparation to answer this question involve! It is said that we shorten life by our mistakes. It is the business of the teacher in this work of which we are now speaking to lengthen life for the young by pointing out as far as possible under all the circumstances the best books to read. Like the "charitable soul" of whom Emerson speaks, "after losing a great deal of time among the false books, and alighting upon a few true ones which made him

happy and wise, he would do a right act in naming those which have been bridges or ships to carry him safely over dark morasses and barren oceans, into the heart of sacred cities, into palaces and temples."

But there are details of all this work which do not uplift the soul of the teacher very much. Probably the drudgery of correcting compositions is one of them. We do not intend to discuss these details minutely. It is sufficient to indicate in a general way how far they may go. At some point, early in the course, the formal study of rhetoric should begin. There should be a daily recitation for at least one term. In this the writing of all sorts of exercises should be frequent. Perhaps, if this class be formed during the first year, it will be found sufficient to continue the subject, increasing, of course, its depth and breadth, at the rate of one hour a week for the remaining three years of the usual high school course. This is certainly none too much time to give to these important subjects. Even under this arrangement there may be a few who will complain. Possibly some people may argue that their children are not going to be public speakers or authors, and hence do not need the drill of writing and speaking and other literary work. To this there are two answers. First, how do you know what is in store for your children? How can you tell to what extent they may have to use the power of expression which now receives the teacher's attention? Secondly, They are certainly going to live and move among their fellow-beings, and as educated men and women should be ready with an opinion worth considering on books and reading, able to give some light to others as well as to guide themselves. Suppose the whole of every Friday afternoon to be devoted to literary and rhetorical work. Is that too much? It is one-tenth of the usual school hours. To accomplish enough to tell on the taste of the pupil, this is not one moment too much, particularly if we use half of this half day for the public exercises of the school.

The colleges are helping this line of work. The requirement that candidates for entrance be able to write a short essay on an assigned subject, is one of the best that has ever been made. This line of study is inferior to none. In every school of academic grade it should be carried at least as far as has here been slightly indicated. We would not make mere declaimers or demagogues. As Lowell says: "The two faculties of speech and speech-making are wholly diverse in their natures. By the first we make ourselves intelligible, by the last unintelligible to our fellows." The tendency of this work is in the opposite direction, if it goes far enough to get beyond superficiality. The very object in view is to make the future men

and women better judges of excellence of literature and soundness in argument. Thus we also make them better qualified to think clearly and to express their own thoughts in correct and elegant English. If anything has a tendency to give us intelligent citizens, it certainly is this sort of work.

THE LATIN QUESTION.*

PRINCIPAL G. C. SAWYER, UTICA, N. Y.

Apropos of an article in the last number of THE ACADEMY, which announces that "the classics must go," the judgment of a distinguished French critic and essayist, who is a frequent contributor to the "*Revue*," which is so prominent an organ of European thought and culture, may not seem to your readers otherwise than timely and significant. In this country able advocates have spoken in answer to views similar to those put forth by the capable and skilled educator, who has appeared in the columns of this magazine with opinions which claim to be heard. Notwithstanding the confident tone of that article, as though the contest were well nigh decided, I do not think that a careful review of the present condition of classical study in the United States alone will justify such confidence. Reference to the recent "Ironclad Annual Report of Harvard University," where more courses of study and freer range of choice are offered than elsewhere, shows that the Classics are not at that University suffering from want of students, now that their study is no longer enforced but elective. All the information I am able to gather, besides, is to the effect that never were students better prepared for college entrance or in larger numbers, and never was there more interest taken or more real enthusiasm shown in classical studies both within and without college walls. For the very reason that this topic has been pretty fully discussed here, it seemed to me interesting to note the style of discussion abroad. It should be borne in mind that parts of the following arguments used there may not strike one as being as applicable or as necessary in our own country as in France, where the axe is laid by the party of the extreme *Left* at the root of everything which bears the mark or sign of age or conservatism, simply for that reason as necessarily faulty and to be got rid of. Thus in

* Translation (condensed) of an article by F. Brunetière, in the *Revue Des Deux Mondes* for 15th Dec., 1885.

France the Latin question becomes in the hands of extreme radicals a political and social question. Still, noting even here at home some increasing tendencies of the extreme Democratic spirit, it may not be uninstrusive to observe what is the truly conservative influence of classical studies, and that here too, as well as in France, such an instrumentality may serve in our own Democratic society as a beneficial counterpoise to a leveling and destructive spirit, which tends to do away with the old because it is old, and to hail what calls itself new merely because it is new.

The Latin question is in reality the very important question of secondary education, one much agitated for the past twenty years. After repeated changes, amid much fluctuation of programmes of study, Latin has remained the basis of our secondary education. For the old exercises in composition reading of authors has been substituted, philology has been put in place of rhetoric, all with a view to form more scholarly Latinists. But the results obtained cannot be said to answer the fond hopes of their initiators: not only is Latin no better learned in the lyceum, hardly as well, while French derives no advantage as being better learned.

But now, after these efforts for changing our methods seem not to have improved the quality of teaching, a more radical design is brought forward. All the reasons by which, at other times, the study of Latin might be defended are, it is claimed, superannuated. "Of what use are the *Æneid* and the *Philippics*? We live no longer under the Institutes of Gaius. We are of the age of steam and electricity and of Democracy. We need no longer what will serve only as an ornament for society, but to be armed for the strife of existence." What then is education? Merely the study of facts? Must we be held to know all that can be ascertained even to the existence of *Pterodactylus Spectabilis*? Whatever be the utility of such knowledge it is also true that from ten to twenty years of age we learn much positive knowledge only to forget it. Unless studied with view to a profession, it is asked, who retains a knowledge of the classics? On the other hand, who keeps an accurate knowledge of his Physics, his Geography, his History? No more than the body assimilates all the nutritive elements which are taken into the system, or even rejects them when these are in too great quantity, so nothing is gained by overloading the mind with nutriment which it cannot digest. The education of childhood and early youth should have no other object than *itself*. It proposes only to aid the normal, complete, and harmonious development of an *ensemble* of faculties,

whose equilibrium will soon enough be broken in the course of life. The ground is prepared, which will afterwards be planted when the time of professional instruction shall come. And this time for many reasons I earnestly desire, instead of being advanced, shall rather be retarded. The French become specialised prematurely.

But, it may be said, granting that early education should be purely formal, it matters little what are the means used provided the end be obtained. The presumption, then, would be considerable in favor of the Latin, for why change a general course of education, if that which is to replace it will produce no better results?

But better reasons than this can be given for maintaining this language in the rights it holds from custom and tradition. And, first, for a "dead" tongue, the Latin is in a pretty lively state. It is spoken to-day in more than one part of the world, in the Christian portions of the extreme East, and is still there a precious means of communication. Even in Europe it is still currently used in Hungary, in Bosnia and elsewhere, without reckoning that it is always the official language of the court of Rome.*

After all, a statesman, may need to consult an encyclical in the original text. But *savants*, whether French, English or German, do not disdain at times to have recourse to the Latin when they wish to bring their works to the knowledge of a more extended public. Indeed, the Latin might yet, as it once was the language of scholars, be made use of as the universal language, which has been sought for as so necessary.

Again, for a scientist to be cognizant of all that is doing in his line, he must know not only one, but half a dozen modern languages, all of which the Latin might advantageously replace.†

Macaulay has said "In the time of Henry VIII. one who did not know Greek and Latin might as well not have known how to read. Latin was the tongue of court and school, of diplomacy and controversy." To this we may add that what was then literature has now become history, which cannot be penetrated without the aid

* The translator would add that he can testify to the present use of this "dead" speech by several travelled friends, who, after vain efforts in different parts of Europe, to communicate with people in some one of the modern languages, of which they had supposed that they knew something from study perhaps by the "Natural Method," fell back on the modicum of school-boy Latin, which they had assimilated in youth through the old and now much abused instrumentalities of "studying the grammar and thumbing the lexicon," the precept of my Salem Latin school teacher, Oliver Carleton, of blessed memory.

† The translator adds that even now the scientist, if a Latinist, can read, as is well known, with comparatively little difficulty, books written in several of the continental languages, and also will come to the study of others, when needed, knowing, if well-grounded in Latin, how to take hold of them.

of Latin. If any one wishes, for example, to study deeply the history of the Reformation, the knowledge of Latin alone would be more valuable than of French, Spanish or German. If one goes back of this period, the case is still stronger.

But, independently of the value of Latin as an instrument for the study of literature, antiquity, and science, and also without regard to its undisputed value for a truly scientific knowledge of the Romance languages, there is to be recognized in the Latin classics an absolute value of their own, which, by common consent, is wanting in the French, the English and the German classics. We may mention works of great modern authors in poetry, oratory, history, that one may, in this or that respect, prefer to Horace, to Cicero, to Livy, and point out failures in each one of the latter. But what I maintain is the advantage of the Latin authors in forming the youthful mind. This I cannot gainsay without at the same time denying the work of the Renaissance itself. It was the close study of and familiarity with the Latin classics which in former times emancipated the modern spirit from its long minority. The Humanists broke the circle in which scholasticism had for six hundred years enclosed European thought. What has rejuvenated the history of the Occident but that which has been called the general Latinization of culture? And from that time on to the present it is to the source of classical antiquity that modern thought has constantly returned to rejuvenate its inspiration. Whenever it has appeared to deviate from its route, it has always sufficed, in order to bring it back, to recall it to respect for antiquity. And, in fine, I am not sure but that it might be asserted that the most original minds, for the last four or five centuries, have been the most familiar with antiquity.

Let us try to state the reasons for this. If education proposes to form sound, just, sincere minds, no discipline, not even that of mathematics, is equal, for this purpose, to the school of the Latin classics. With whatever faults, they do not aim at brilliancy at the expense of good sense; they have, perhaps, a limited scope, but, on the other hand, their tone is lucid and moderate. For developing an idea, following it to its consequences, decomposing it into its parts, and, when necessary, recomposing it without mingling anything irrelevant, they are without rivals, even among the ancients. And this is because the reason dominates in them over the imagination, and holds it in check, permitting only rare and inoffensive discursions. By frequenting the Latin classics the mind can acquire only good habits, and nowhere can it acquire better or as good. Shakespeare is too profound, at times obscure, Goethe often too much of a savant.

The Latin classics have one advantage over all others, the superiority of good sense and reason, which they owe to the nature of their language, the gravest that has ever been spoken, or to the nature of their genius, or that of their historical formation. But this is wholly certain that, if the Greeks invented the logic of philosophy, the Latins were makers of the logic of common-sense and daily life.

The same justice should be rendered to their psychology. If these Classics are less English than Shakespeare, less French than Molière, they are, on the other hand, more *human*, a great advantage for their continuing to be the educators of early youth. Nothing in them is logical, particular, almost nothing is of the individual. In a very general language they express general sentiments, which are those of humanity. While great writers among the moderns are intelligible only to men of the same experiences, others, again, to those only of their own nationality, the true Latin classics, Virgil and Cicero, Horace, Livy, Terence, Cæsar are immediately comprehended by every thinking man. They are cosmopolites, and of all times and of all places as well. A philosopher might say that they observe, that they write out of and above the Categories of time and space. With ready hand and sure stroke they trace, so to speak, the psychological contours of the universal man, whose soul since their time will go on always modifying, complicating, enriching itself in a thousand ways, but will not for that cease, in its essence, to be itself. Therefore are they simple, with a simplicity of which we have not refound the secret, another reason why they are marvellously suited to the education of youth. A youth of fifteen years set to read them will not, perhaps, understand all the fine points of their rhetoric, but he will find himself upon a level with them.

What I have said of their psychology I can say of their morality. They are laic. Bossuet, Voltaire, each, in his way, may form fanatics, not so Cicero or Livy. Who will ever draw from Horace a lesson of intolerance, and what umbrage can any one take at the superstitions of Virgil? It may be doubted in respect to morals whether great discoveries have been made since their time, or, at least, such as have been made, are rather in the way of explications of the true nature of morals. But, however this may be, the lessons which they give, the rules they teach, independent as they are, of all dogmas, are suited to a Jesuit seminary, a Protestant school, or a Catholic college; can disquiet tender consciences no more at Moscow than at Madrid. When Latin authors are gross or indelicate, it is in *Latin*, besides, as woman occupies no large place in their literature, expurgation is much easier than in modern works.

What of their literary qualities? Shall I say that in them less of effort is felt, that in a world of narrower limits they move more freely, with more ease in their force and more grace in their facility? that their faculties are habitually maintained in a more stable equilibrium, that, in a less complex and less artificial civilization, they lived nearer to nature with a view less extended but more harmonious, and in so far, more complete? They are in this the more finished authors, that having placed less high their ideal, for this very reason, they almost always attain it, and thus serve as everlasting models, witnesses and masters of those qualities that are to be learned as well as of faults that are to be shunned.

One consequence to be deduced from the foregoing is that the foreign literatures themselves, which it is desired to substitute for it, are intelligible only by the light of the Latin. The Ancients are the models still. For one instance, the literature of Germany dates but from the day when Lessing and Herder renewed upon German soil the sense so long perverted of the study of antiquity.

All the great literatures of Europe may be roughly divided into two portions:—one so national, so specially French, German, &c., that only those to whom it is native can appreciate it, with the exception of a few poets and critics; another part of a general nature, which, as such, is scarcely comprehended and certainly only applied by means of this Latin culture from which it effectively proceeds.

Just so long as it shall not be the business of education uselessly to anticipate an experience of life which life alone can give, but to prepare us to profit by this experience when life shall impose it upon us, so long will the ancient languages, and particularly the Latin, remain the basis of education. For, on the one hand, there is no other way of employing more profitably the time which it is complained that they take, since the studies which would be substituted,—history or the modern languages, can bear fruit only on condition of falling upon a soil which Latin can best prepare. But, on the other hand, it is of comparatively little importance that once engaged in the pursuits of life we rarely re-read the *Georgics* or the *Catilinarian Orations*, since the object is by such studies mainly to prepare the ground or to occupy it while waiting for it to become capable of other culture.

What, in sooth, are the pressing necessities in the name of which our system of secondary instruction is to be upset?

But, again, our opponents attack the Classics as essentially aristocratic. "It is time," writes one, "to pull down the useless from the height where the French Revolution has still left them, but where the economic evolution of the nineteenth century is bound to reach

them." What appears unjust to democracy is not that there should be cultivated men, but that a certain culture makes them the successors of the long-continued past, and that, thanks to them, this past continues to live in the present. The actual ideal of our democracies is that each generation on entering life should have to make anew its own destiny. An attack is made upon traditions because they are traditions, upon antiquity as antiquity. One thing is here forgotten in this war upon traditions that humanity is composed more of the dead than of the living; that the solidarity of the generations throughout the ages of history is the very bond of societies, if even it be not their cause, and that civilization differs from barbarism in nothing so much as by the extent, the nature and the antiquity of the traditions which it respects and continues. Around a tradition are grouped and formed nations; it is their traditions which prevent, at each moment of their collective life, these nations from being disrupted; it is the price they set upon their traditions which is for them the only gage of the future and the only promise of duration. Far then from weakening this force or prestige, let us rather nurture its cultivation. And, as for us as individuals, life would be scarce worth the living, were it enclosed wholly between the two moments of birth and death, having *itself* only in the present for its object and end.

The real question, then, is to know whether the best preparation for the future is ignorance or contempt of the past. Herein consists the problem of education as well as of the Latin question. If it is believed that democracies in the present age tend enough of themselves to establish a reign of mediocrity, and, on the other hand, that an education based upon the culture of antiquity and tradition is the best and surest means of favoring the only aristocracy which is left us, we shall be on our guard against committing the monstrous *maladresse* endorsed by imprudent innovators. For the abolition of classical instruction is simply a step further in the direction of suppression of the aristocracy of intelligence. Democracy will some day thank us, because neither man, much less societies, lives not merely on the products of manufactories, because a purely scientific and industrial civilization would in reality be a barbarism more frightful than was the ancient, inasmuch as we shall have preserved to it all that will make, in the future as in the past, the sole value of life.

All this in the Latin question? Yes, since it has been put there!

ELECTIVES AT HARVARD.

In his report for the college year 1884-'85, just issued, President Eliot discusses the question of electives in the light of experience. It is no longer necessary to make assumptions about the incompetency of boys to choose their studies and about the tendency of students, at Harvard at least, to select "soft" courses. The theoretical question, how young men would use freedom of choice if such freedom should be granted them, gives place to observation and interpretation of choices actually made by young men in a number of instances abundantly sufficient to warrant conclusions as to the success of the elective system.

The president shows, in tables admirably planned for ready comprehension, just what were the choices of 350 young men for the last three college years. These 350 students are all the members of the classes of 1884 and 1885, who selected their courses for three consecutive years, and come within twenty-three of the entire membership of the two classes at graduation. No cases are therefore omitted that would have a bearing on the results. Any reader of the report can see what courses of study each young man chose for each of his last three college years, and any reader who trusts himself to judge what constitutes a wise selection, may make his own inferences as to the discretion shown in each instance, as well as to the general prudence and thoughtfulness that prevail among the mass of students.

The number of electives offered at Harvard for the year 1884-'85 (much increased however for the year 1885-'86) was 180. Of the 350 students who chose from these 180 courses, no two chose precisely alike. Of the 180 courses offered, 15 appear to have been omitted for lack of sufficient students to form classes in them, all these omitted courses being either very advanced ones or else being courses in very abstruse subjects, popular interest in which has not yet been awakened. Thus it is evident that the young men at Cambridge availed themselves fully of their privileges of free choice, and did not, either of their own impulse, or under advice of friends, take, in the aggregate, as they might have done, a narrow range of studies, such as they would have been forced to take in a college where everything is still prescribed. Many other signs also indicate the profound interest which the students take in their choice of studies. Teachers in the preparatory schools, to whom the young

men when in college still look for advice on such matters, know that the choice of electives is to the student a serious business, on which he is sure to consult such of his elders as he can approach with any prospect of help that shall have regard to his personal needs and circumstances. In truth, the adoption of the elective system adds to student life a most desirable element of seriousness,—a sense of responsibility that must be met, and cannot be evaded by indolent reliance on external authority.

If freedom in the choice of studies were offered to young men and were not accepted, of course the elective system would be, from the outset, fatally discredited and its enemies would enjoy a speedy triumph. But freedom in the choice of college studies will also be discredited, if, being accepted by the students, it is unwisely or capriciously used, or if, to adopt the contemptuous phrase with which it is so often attempted to bring the Harvard system to confusion, it is used as a means of getting “soft” courses and of avoiding work. To the discussion of this point President Eliot devotes a large portion of his report. As the facts which he discusses are all presented in the tables we have referred to above, it is easy to watch his inferences and to satisfy one’s self as to whether they are legitimately and logically drawn. This part of the report in fact should be read with constant reference to the tables, and the tables themselves should be studied diligently by any one who purposes to allow himself in the future to express an opinion as to the attitude of college students toward elective courses of study. *A priori* dogmatizing is offensive and useless even when the facts are not yet tabulated and published; but dogmatizing that ignores accessible facts is an act of intellectual treason, which it is precisely the object of a liberal education to incapacitate a human being from committing.

The first question asked by the president in interpreting the significance of the tables of students’ choices concerns specialization of work. Have the young men unduly concentrated their efforts upon a small number of subjects, to the neglect of breadth and harmony of culture? As there is no standard course of study recognized in the world of educators at large, departure from which in either direction results in specialization or dissipation, the question above asked cannot be categorically answered. It might perhaps be reasonably laid down as a principle that a young man who expects to add to his college course another course of professional study, should spread himself somewhat widely in college, while a young man who is to enter a business life may consult his tastes and pursue that line of liberal study which will in after years probably

be the solace of his leisure. At any rate, there is no ground now known to pedagogy on which it is safe to condemn indiscriminately a considerable amount of specialization of study in young men of from 20 to 22 years, whether they are studying in a college or a university. The president's own summing up of the facts shown by the tables is as follows: "Among the whole 350 recorded cases it appears that there are only 27 cases (less than eight per cent.) of highly specialized work (at least two-thirds of three years in the same subject), and that of these 27, only 12 are cases of extreme concentration."

To answer the inquiry "whether students free to choose their studies exhibit generally in their choices some intelligible plan and a reasonable degree of persistency," three experts were procured to examine, independently of each other, the 350 cases of election of studies for the three years. The result is extremely significant. "Two of the three experts (not the same two in every case) agreed in considering as deficient in coherency of plan twenty-one cases in all; but the three agreed only upon six cases." Of course, if three experts agree on not even two per cent. of all choices as being deficient in coherency, the case for election is won. Even if all choices are to be condemned as incoherent upon which even two experts agreed, the complaint of incoherency is still to be set aside.

The report considers very fully and convincingly the stock objection to elective studies that they encourage habits of indolence by making easy courses possible. The American "boy" has never perhaps, in all his career, been so systematically and persistently maligned as of late by the champions of prescribed studies in college, who have not ceased to proclaim the fact of his being a *mere boy*, incompetent to choose for himself, and resolutely bent on getting his diploma with the smallest possible outlay of work. The "boys" at Harvard, at the three times when they made their choices, were respectively 20, 21 and 22 years old. That educator has observed young men in vain who does not know that at the age of 20 nature has already clearly begun to individualize them in tastes and aptitudes. It is possible even to maintain much more than this, and to find in nature arguments in abundance for differentiation of work at a much earlier age. But at twenty it is certainly no longer just to the youth to prescribe for him without reference to his personality. Now nature marks out what may be called in education, as well as in physics, "lines of least resistance," along which education will move prosperously and therefore easily. A wise teacher will try to find these lines of least resistance, and will not mistake the ease of movement that results from a happy adjustment of his

requirements to these lines, for the ease affected by indolence and laziness. Education requires that a man should have done hard work; but it does not mean that he should have done it in a hard way, against his grain, with sympathies unenlisted, without insight into its relations with other things he knows or aspires to know. To take an illustration from Paulsen; A walk of several miles in the morning air, among the endless objects that delight the senses and employ the mind in a beautiful summer landscape, is easily accomplished, but its physical and spiritual benefits are very great; while a walk of the same distance undertaken for the purpose of getting some article that has been forgotten and must be fetched at once, is hard and disagreeable, and as useless as it is grievous. Even men with all the presumptions of high training that pertain to college presidents have been known to confound these two kinds of *hard* and *easy*. The very object of elective studies is to allow instruction to undergo a process of natural selection, and to adjust itself to the lines of least resistance. Education succeeds in so far as it finds these lines and continues to move in them. It fails in so far as it adopts the superstition of uniformity and imposes a course determined by any authority whatever upon all alike. To settle the question for Harvard, President Eliot draws up another table showing just what courses have been most thronged by students. That these courses are not the ones popularly reputed easy appears at once. But the assumption that there are at Harvard any *easy courses* has in itself no value.

Several colleges, recognizing the necessity of offering to students a choice of courses, and still dreading the consequences of allowing all the freedom consistent with a proper sequence of studies, have adopted *groups* of subjects, thus greatly restricting, but not wholly denying, freedom of choice. The group system assumes to be able to select subjects by virtue of some inner relationship that binds them into harmonious wholes. It assumes to say to the student: "You may take this or that study, on condition of taking certain other studies. If you find the subjects you wish to study in different groups, you cannot pursue them." The principles on which the groupings are made in a technical school are intelligible. A student aiming to become a mining engineer, e. g., will study the subjects which, as a mining engineer, he must know. In no case will the pertinency of the subject he is pursuing to his particular career be to him occult or mysterious, or merely accepted on authority. But who can pronounce on the fitness of various liberal studies to accompany each other, not in the abstract, but in every concrete case? The group system in a college seems to be a relic of the old pedantry

that pronounced no education liberal that was not founded on the ancient languages; for although the grouping may make omission of the ancient languages possible, it still insists on some mystic inter-relationship of studies, and denies the true principle of a liberal education, that "*all* the arts that pertain to humanity have a certain common bond, and are held together, as it were, by a sort of kinship."

In no modern educational movement is involved such promise of good to the secondary schools as in the movement towards freedom of studies inaugurated by President Eliot at Harvard. The colleges hitherto, by their conditions of admission, impose burdens upon the smaller high schools, not only by the Latin and Greek which they exact, but by the shadowy course in Latin rudiments which the high schools still maintain, in imitation of the college demand, and which they usually make the main staple of their work during three years for pupils who do not mean to go to college. Reforms come from above downward. It was fitting that this most important reform in education, the adoption of freedom of choice among many possible studies, all liberal and human, should start from Harvard. It is rapidly gaining ground in the other institutions, and will some day descend to the secondary schools.

NOTES.

Dr. Murray is slowly recovering. He leaves Albany this week on a short visit, and sails for Europe May first to remain several months. THE ACADEMY wishes him a prosperous voyage and a happy return.

In his work of investigating the present condition of Greek in colleges and secondary schools, the editor respectfully "reports progress and asks for further time." Over eight hundred circulars have been sent out with stamped envelopes for reply. Nearly three hundred have already been answered.

A great blessing to a student of history is a good historical atlas. Such an atlas must contain many maps, which must not be on too small a scale. All the conditions of excellence are attained in *Droysen's allgemeiner historischer Wandatlas*. Within the covers of this splendid work are contained over 250 maps, large and small, with 92 large pages of explanatory text, which, of itself, forms no bad *résumé* of universal history. Most striking are the maps to illustrate the French-German war of 1870-71. The battle plans are on the scale of 1,100,000, and are wonderfully clear and full. No portion of history capable of map illustration is neglected.

We have received the first number of *The Forum*. The names on the title-page are such as to render comment almost superfluous and the whole journal is remarkably readable. We hope not every one, however, has had so unfortunate an experience as Mr. Hale. Professor Winchell's article on "Science and the State" will especially interest teachers, and we should quote from it at length if space permitted. James Parton's "Newspapers gone to Seed" is timely and strikes directly at an evil patent to every one. Dr. Crosby's "Shall Our Laws be Enforced?" treats with manly directness and thorough grasp a subject that must early command the attention of good citizens or government with us will be a thing of the past.

American teachers of French and German are not so well informed as they should be of the excellence of the *Sachs dictionaries*. Any person using both these languages with some freedom will find these two volumes, on the whole, the most useful lexical helps within small compass that can be got. The first volume translates French into German, and the second German into French. The scheme of the editor includes still further bilingual dictionaries, to include, in certain combinations, English also. These volumes are unique in their condensation, effected by means of ingenious devices for showing accent and quantity and for referring to model words, giving the clearest possible indication of every feature of inflection. Many proper names are included, often very serviceable as giving pronunciation and hints about persons and places. We miss, however, the name *Söller* as character of Goethe's "*Die Mitschuldigen*." This name is very much needed in the German dictionaries to prevent readers of the "*Italiänische Reise*" from imagining that, when it occurs in that work of Goethe's also, it is a common noun. Even the current translation of Goethe that bears the distinguished name of Dr. Hedge is unable to cope with the passage, "*Kurze Zeit ergötzte ich mich an dem Sohne des Wirths, einem leibhaftigen Söller,*" and in view of these senseless capital letters for all names, how should any one, not fresh from the comedy, and not thinking to turn to the always helpful translation of Porchat, know what to make of this *Söller*?

Two New England city superintendents, whose reports always interest a larger public than that to which they are addressed, are Harrington of New Bedford and Marble of Worcester. Mr. Harrington perennially abounds in ideas for improving the schools, and announces his convictions with a fullness of illustration and a vehemence of argument that greatly attract attention and serve the very useful purpose of helping to form public sentiment, even though it

may be in the direction opposite to his own tendencies. Twenty years ago we made a pilgrimage to New Bedford, drawn by a something positive, direct, clear-sighted and aggressive in the utterances of the superintendent. During these years we do not perceive that that trenchant pen has grown in the least dull, or that it has less occasion than it had of yore to attack stagnation and routine in education. Of late years Mr. Harrington has espoused the industrial cause. We can wish our admired, beloved old friend no more magnificent fortune than that he may yet some day have to give that magic pen loose rein to chronicle the complete establishment of the industrial idea as part of the public education of New Bedford.

Mr. Marble's style is pointed and epigrammatic. He also has positive ideas about industrial education, but they are the ideas of the unbeliever, and are undoubtedly shared by the mass of the very practical community whose schools he superintends. It is simply impossible for Worcester to tax itself beyond its present very generous outlay for free education. Any practical educationist must take into account the very patent fact that more taxation for schools is a downright impossibility. Mr. Marble is clear-headed on this point. Men who see hard facts and know where the limits are which these hard facts determine, and who can confine themselves temperately to these limits, are much needed in education.

In the current educational literature of Germany one finds frequent expression of such views as the following, quoted from a letter of the famous Prof. Esmarch, of the medical faculty of Kiel. The letter is given, with editorial comment warmly approving its tenor, both in Dittes' *Pædagogium* and in the *Zeitung für das höhere Unterrichtswesen*.

"I will no longer hesitate to say that, with regard to the necessity of a thorough reform of our schools, I am in full accord with my colleagues Hensen, Flemming, Stimming, Hüter and others. . . . The conviction that our youth are mentally deteriorating under a system which forces them to occupy themselves principally with subjects in which they feel no interest, and which have no permanent value for them is evidently gaining ground among educated men. . . . The reasons alleged by the classical philologists against the admission of real-school graduates to the study of medicine seem to me extremely weak. By an experience of many years I have become convinced that most gymnasial graduates bring to the study of medicine a wholly unsatisfactory preparation. First of all it should be demanded of the physician that he possess *general culture*. But that not many of the students who were trained at the

gymnasia bring anything that ought at the present day to be named "general culture," is the unanimous opinion of, for example, our faculty. Of prime importance to general culture are an adequate acquaintance with *modern languages*, especially English and French, skill in the use of the mother-tongue, an abundance of scientific information founded on observation, and, finally, the ability to give to one's thoughts tolerably satisfactory expression by means of the drawing-pencil. All this seems to be lacking to most gymnasial abiturients. At the same time I have found that but few are capable of comprehending sense-impressions well and quickly, of judging them clearly and of stating them logically. One meets very often with a sort of apathy, a kind of intellectual near-sightedness, which is worse than the visual near-sightedness that is quite as often acquired at school. It is as if the youthful intellect were stunted, as if it had lost its freshness, in consequence of undue occupation with grammatical subtleties; while the ability to observe, always so eager and active in youth, has died out under the excessive accumulation of studies which can have but little interest for the youthful mind, and whose pursuit is not founded on observation. I hope and believe that it will not be long before indignation at the still prevailing system will have taken hold of the greater part of educated persons in Germany. Then some day will arise a pedagogic Luther or Stephani who will break down the barriers and put an end to the domination of the grammatocrats, and our children's children will have a happier school-time than we and our children have had."

In the *Cornell Daily Sun* for February 10, it is announced "that the head of the department of Greek is in favor of making the collegiate work in this subject entirely elective, and relegating the required minimum to the preparatory schools."

Professor Flagg's high reputation as a Hellenist, and his remarkable success as a teacher of Greek, make any suggestions from him worthy of thoughtful consideration. A somewhat careful reading of his article, however, fails to make one sure just what this announcement means. The "required minimum" is nowhere defined. It "is not more than can be well learned by the student of fair ability who does not develop a liking for Greek." "One reason why it has never yet been possible to enforce a respectable standard of admission in Greek here, is that it has seemed both unjust and impracticable to insist on a good knowledge of the preparatory matter, when a year or more of collegiate study is asked for in addition. But with the reasonable minimum now proposed, there will be no

hardship in a thorough examination." Does this mean that another year or two is to be added to the preparatory work in Greek? or does it mean that the present amount of preparatory work is to be lessened and better results required in that work? In either case our sympathies go out strongly for the preparatory teachers who are to struggle with students who do not "develop a liking for Greek."

Professor Flagg "believes that a certain amount of Greek knowledge ought to be, and may fairly be, required for the degree of Bachelor of Arts." In this he is at direct variance with those who think Greek as a required study should be dropped from all courses. One can hardly dissent from his statement that at present the degree of Bachelor of Arts is one of the most highly prized in all our colleges, but many will hold that the very reason for its being so highly esteemed is that it represents so largely the element of required work.

Behind all this question of college electives stands the relation of the so-called universities to the secondary schools. We frankly confess we are not of the number who believe specializing should begin from the cradle or ordinarily even from the fourteenth year. We believe it should begin in the university and when youth is changing to manhood. Until that time we think general lines of study, not identical for all tastes or capacities, should be followed. To us it seems an absurdity to say that on entering a university a student is ready to choose for himself when every year there are entering our universities students who would find difficulty in the entrance examinations at any reputable high school. Americans as a rule specialize too early. No wise physician advises a medical student to choose a specialty on beginning his studies in medicine. No mistake is more easily made than a mistake in regard to one's natural aptitude. Eager partisans quote the German universities, forgetting that the German university student is always at least verging on manhood and has been subjected to a long course of general studies till his mind is well disciplined.

We do not think that Greek is a *sine qua non* in education, but we do sincerely believe that no man who has done well the preparatory modicum of Greek has cause in any profession or in any line of work to count the time ill-spent. Just as no man who has enjoyed a thorough course of physical training can ever tell how much of vigor and elasticity in after life he owes to that exercise, so no man in middle age can exactly estimate how much his mental calibre is indebted to general studies. Just as no man in a hale and vigorous old age can say precisely what he owes to temperate and self-deny-

ing youth, so no man who thinks clearly and expresses himself readily can rightly say how much or how little he owes to some one study out of many he has pursued in youth. Only by a wise generalization from many cases can we judge of the value of special influences either physical, mental or moral.

Some time we shall have a word to say on the character of mediæval learning now so often held up to ridicule; and, if we mistake not, the absence of Greek study in the mediæval systems of education will be more conspicuous than it is likely to be again for many years to come.

BOOKS RECEIVED.

OUR FIRST WORD *implied a willingness to admit book-notices written by teachers not directly connected with THE ACADEMY, provided their names were signed. The disadvantages of that arrangement, not obvious to us at first but plainly manifest now, force us to announce a change of policy. Our aims and methods have not changed, but in future all notices will express simply the views of THE ACADEMY.*

Algebra Tablet No. 2. Fractions and Simple Equations. Potter, Ainsworth & Co., N. Y.

One month ago we found occasion to commend the first number of this series. This number simply confirms our good opinion.

Shakespeare's Tragedy of Hamlet, Prince of Denmark. Edited, with Notes, by Homer B. Sprague, A. M., Ph. D., President of Mills College. Chicago: S. R. Winchell & Co.

The amount of labor bestowed by the annotator is manifest in hundreds of carefully prepared foot-notes. They are more comprehensive and judicious than those of other editions previously presented to the public. Shakespeare, better than any other English writer, will bear such an exhaustive and minute analysis. As a well known writer has expressed it, "Every word of the great dramatist is a shout." He strews the ground with a confusion of Titanic fragments from which the imagination of the reader must rebuild the wonderful structure which first stood within the poet's brain. To aid in accomplishing this Mr. Sprague has, as he aims to do, assisted by suggestion and query rather than by digesting for readers the literary food which the play presents. An instructor in English literature, while he cannot fail to profit by such abundant notes, will rarely find it possible to utilize them all in conducting a class through an extended course of reading. Such critical work, so essential to ripe scholarship, generally annihilates a young student's enjoyment of an author. So much, too, is demanded of us as readers that, while we are reluctant in admitting it, we must often resign ourselves to being superficial. Then, too, it should not be forgotten that one aim in reading is to preserve a lively interest.

The Introduction to this edition of Hamlet is particularly valuable. The Appendix contains suggestions of eminent teachers on the study of English literature. The examination papers upon the work collect and concentrate the suggestions which have been presented in the study of the text. Over sixty topics for essays upon the tragedy reveal how much material for thought may be evolved from any of the poet's dramas.

The Leading Facts of English History, by D. H. Montgomery. Boston : Ginn & Co. 1886.

The attempt is here made to present, in 187 pages of very open print, an outline of the entire course of English history. The author does not announce what particular educational purpose he means his book to subserve, so that in estimating its value from a teacher's point of view we may be going far astray. As a single text-book of English history, to be put into the pupil's hands without further helps, it would be unintelligible. Where so much of the story is passed over, as is necessarily the case in a work of such small compass, there is danger of abrupt transitions which disconcert the beginner none the less for being theoretically justifiable. History is a narrative of events having sequence and connection,—at least it is this to the young student; and a wise pedagogy will not forget that the youth will read even history in the youthful manner and not in the manner of the philosopher.

But if the book is intended as a guide to a *review* of English history, when the pupil already knows the story and is mature enough to reflect upon causes and effects and to appreciate the blessings of constitutional government, it deserves a fair measure of approval. The "leading facts" are generally well presented, with such discussions and conclusions as the modern writers on English history would sanction.

Much as the author has studied brevity, he finds space to announce Elizabeth's death thus: "In that sullen mood, and without naming a successor, she departed to that silent majority whose realm under earth is summed up in the two words, '*hic jacet*.'" And so on for seven lines further of matter no more relevant either to use or to ornament. How is a young pupil to interpret aright such a statement as this;—"Poverty there" (in England) "may still be a crime, but it is regarded now as a crime having extenuating circumstances." Will a teacher put before his pupils such an infelicitous bit of moralizing, to have it to explain away and account for? As an instance of the disjointed style that results from the attempt to give to paragraphs the semblance of unity, note the following: "In 1858 the first Atlantic cable was laid connecting England with America. Three years after that event, in whose celebration the queen took part, the prince consort suddenly died. Since then no court has been held, and so complete has been the queen's seclusion, that in 1868 Sir Charles Dilke moved in Parliament that her Majesty be invited to abdicate or choose a regent," etc., etc.

Important adjuncts to the book are tables giving the "Descent of the English Sovereigns," and "A summary of the Principal Events of English History," with abundant references to authorities and sources, enabling the reader to make investigations for himself.

There are also a brief and inadequate chapter on "The Peers, the People and the Government," and one presenting a "Outline of the Constitutional and Political History of England," which is very valuable. An interesting table of statistics and full indexes complete the volume.

A. H. Andrews & Co. General School Furniture.



Manufacturers of the Celebrated "**Triumph**"
and "**Paragon**" Dovetailed SCHOOL DESKS.
Over One Million in Use.

Send for Catalogue and Circulars of Everything for Schools.

GLOBES, TELLURIANS,
NEW MAPS,
ANATOMICAL CHARTS,
BLACK BOARD MATERIAL, &c., &c.

A. H. ANDREWS & CO.,

686 Broadway, New York City.
163 Swan Street, Buffalo, N. Y.
484 Broadway, Albany, N. Y.
815 Arch Street, Philadelphia, Pa.
611 Washington Street, Boston, Mass.
195 Wabash Ave., Chicago, Ill.

Academic Algebra,

—PREPARED BY—

WEBSTER WELLS, S. B.,

Professor of Mathematics in Massachusetts Institute of Technology.

There has seemed to be an urgent demand for a preparatory book that should be elementary in its character, and yet sufficiently *complete* for any

HIGH SCHOOL OR ACADEMY,

and that it should be arranged by a

PRACTICAL TEACHER OF THE SUBJECT.

It will be found especially strong in those essential features of Algebra which must enter into all the student's future work, and in which so many other texts have been deficient.

Wells' University Algebra

is used at HARVARD, CORNELL, PRINCETON, LAFAYETTE and about 100 other Colleges in the United States.

LEACH, SHEWELL & SANBORN,

PUBLISHERS,

87 Franklin St., Boston,

743 Broadway, New York.

The Best Text-Books in Book Keeping.

Meservey's Single and Double Entry

For High Schools and Academies.

"Meservey's Single Entry."—For Grammar Schools.

Meservey's text books in Book-keeping have been legally adopted in more than six hundred and fifty cities and towns, and over seventy Academies in New England alone. They are also extensively used in other States.

Meservey's Political Economy.

JUST PUBLISHED.—An elementary work by the author of Book-Keeping designed for High Schools and Academies. A clear manual, Easily Comprehended.

"Stone's History of England."

Fully Illustrated with Maps, &c.

By A. P. Stone, LL. D., Superintendent Schools, Springfield, Mass. A special feature of this book is the prominence given to features of social life and progress, giving the pupils an idea of the manners and habits of the people and state of society at different periods. It has recently been introduced in Boston, Mass., Indianapolis, Ind., Portland, Me., Minneapolis, Minn., and other important cities. Send for descriptive circulars of above books. Copies sent for examination at the following terms: Book-keeping, Single and Double Entry, 50 cents; Single Entry, 30 cents; History 50 cents; Political Economy, 30 cents.

THOMPSON, BROWN & CO.,

23 Hawley Street, Boston, Mass.

PATENTED DEC. 8, 1885.

NUMBER TABLETS.

FOR SUPPLEMENTARY WORK IN ARITHMETIC

BY A. W. POTTER, M. S., and T. J. McCONNON, Ph. D.

NUMBER TABLETS, Nos. 1 to 12, per dozen,	- - - - -	\$.86
NUMBER TABLETS, No. A,	- - - - -	.45
ANSWERS TO NUMBER TABLETS, (pamphlets) per copy,	- - - - -	.12
In preparation, ALGEBRA TABLETS, Nos. I, II, III, per dozen,	- - - - -	1.26

Each Tablet consists of 50 pages of examples perforated and to be detached and handed in by pupils,—with from 5 to 15 pages of blank paper. Orders for mail shipments must be accompanied by six cents in stamps for each Tablet.

These Tablets are so graded that a year's school work is supplemented by two of them, thus giving on an average one Tablet exercise every two days. No more problems have been placed on each leaf than the paper below will be sufficient for their solution; but, if not sufficient, the leaf may be torn at the line of perforation and turned over. Extra leaves to replace soiled pages are bound in the back of each tablet.

LANGUAGE TABLETS,

For Supplementary Work. Arranged for Schools of all grades. In twelve parts, each containing 50 sheets; 50 sheets of from five to ten exercises to be written out on sheet below, which is perforated, to be detached and handed in to the teacher. Nos. 1, 2, 3 are beautifully illustrated with appropriate pictures. No. 1 contains 10 pages of script, expressly drawn and engraved for this series. Nos. 1 to 4 are also ruled on a scale of thirds, like copybooks, with double ruling. Numbers 4 to 12 have single ruling,—per dozen, \$.86.

Wilson's Treatise on English Punctuation, latest revision, per copy, \$1.
 Champlin's Intellectual Philosophy, Gillet and Rolfe's New Works on Physics,
 Dinsmore's Physiology, Webb's New Work Method,
 Dinsmore's Model Script Spelling Blanks.

For complete price-list, sample copies and terms for introduction, please address the publishers,

POTTER, AINSWORTH & CO.,

200 Wabash Avenue,
CHICAGO.

107 Chambers Street,
NEW YORK.

22 Bromfield Street,
BOSTON.

THE ACADEMY:

A JOURNAL OF SECONDARY EDUCATION,

DEVOTED TO THE INTERESTS OF HIGH SCHOOLS, ACADEMIES AND ACADEMIC
DEPARTMENTS.

GEORGE A. BACON, . . . MANAGING EDITOR.

VOL. I.

MAY, 1886.

NO. 4.

*THE EFFECT ON PREPARATORY SCHOOLS
OF OPTIONAL EXAMINATIONS FOR
ADMISSION TO COLLEGE.*

HEADMASTER MOSES MERRILL, LATIN SCHOOL, BOSTON.*

Mr. President, Ladies and Gentlemen:

I trust you will pardon me for trespassing upon your attention and patience for a few minutes by giving you a brief outline of the origin, growth and present phase of the optional, or elective system in our colleges. This outline seems necessary because our discussion turns, not on the present, but a prospective relation between the colleges and the preparatory schools. Unless it can be made to appear that there is a reasonable probability that examinations for admission to college will soon become optional in the choice of subjects, and not merely in equivalents in the same subject—a privilege which has been accorded to candidates to a limited extent for a long time—this discussion would be inopportune and the expenditure of time and thought futile.

Until the year 1825, a prescribed course of studies prevailed in all American colleges, with the possible exception of one or two subjects. About this time certain subjects, very few in number, were made elective in the Senior Class. President Eliot gives an account, in his Annual Report of 1883-'84, of a successful experiment in vol-

*A paper read before the Nineteenth Annual Meeting of the Massachusetts Association of Classical and High School Teachers, at Boston, April 9, 1886.

untary studies, as early as the Freshman class and confined to the modern languages which occurred at Harvard as early as the year 1826 to 1833 inclusive. Perhaps this is the only instance of a departure from a strictly prescribed course in the early part of a collegiate curriculum, until the recent action of the Harvard Faculty which made three-fifths of the Freshman work elective.

The change from the prescribed to the elective system has been gradual. But the tendency appears to be in the direction of extending the privilege of option to all classes in all colleges. The Faculties of the great majority of colleges are decidedly conservative in their views and action upon this privilege. But all are yielding, in greater or less degrees, to the force of circumstances and of public opinion. There are strong and earnest protests against carrying it too far, principally from the Faculties themselves. This will defer, but will not prevent the introduction of electives throughout the entire collegiate course, at least by all the larger and older colleges and universities. The more progressive are gaining ground and the more conservative are losing. This is plain to the most careless observer.

Though Faculties are autocratic in arranging their respective courses of study, and they need ask the endorsement of no one, and, formally, never do ask it; yet there is behind them, as behind all deliberative bodies in the country, a power influencing them in every step of their action. That power is public opinion. It is resistless. There is as sharp a competition between the colleges of this favored land, as between most branches of industry. Oxford and Cambridge can afford to be conservative, because they are, par excellence, the universities of England. But with all their pre-eminence, one is often surprised at their progressive and liberal action. In this country where there is a college, to say nothing of all other higher institutions of learning, for every one hundred and fifty thousand inhabitants, it becomes absolutely necessary, sometimes even for existence, to be an acute discerner of the times and not too rigorous in the tests for admission. Setting aside the question of existence, however, the members of our college Faculties justly rank among the most learned and intelligent men of our community, and all have positive views upon the methods and aims of education. These views are by no means unanimous. In fact, they are quite the reverse. Therefore we can never expect any uniform plan in academical courses or instruction. When a new branch of knowledge is introduced into the college course, a new element of antagonism is introduced. A new specialist becomes a member of the Faculty, and he is neither true to his convictions nor to his subject, nor

loyal to his institution, unless he makes it appear to his associates, so far as they will allow themselves to receive his convictions, and to the public at large that his subject conduces to the mental, moral and religious development of the student, if not in a greater, at least in an equal degree to that of any other branch of knowledge. I do not regard this antagonism as harmful, but it is subversive of uniformity. If it were confined to colleges, it would cause no apprehension in my mind. It appears to me to be just and reasonable that the elective system should be extended in the college curriculum. In fact, the extension of this system has not kept pace with the increasing requirements and average age of candidates for admission to the Freshman class.

If a Senior fifty years ago was allowed, by right, the privilege of choosing his studies, on account of his age and acquisitions, a Sophomore ought to be granted the privilege to day. The average age of candidates admitted to Harvard in 1830—fifty-five years ago—was sixteen and three-quarters years. The average age now is nearly, if not quite, eighteen and three-quarters years. If you take out a few of the oldest men—say six or eight—in calculating the average age of classes in those days, it would be much lower. Taking out a proportional number of the classes of to-day, the average age would not be materially changed. It was not an uncommon thing for boys of thirteen and fourteen in those days, to be members of the Freshman class. It has now become a notable exception. Electives have already been extended to the Freshman class in one college, and doubtless will be in others in the immediate future. But I think there is great force in Professor Ladd's argument on this point, not only in the reason he gives, but because I think that the preparation for such selection is not carried far enough in the preparatory schools. He says—"It seems to me that the very fact of the new surroundings with which college life begins is an argument the other way," (i. e., to defer the electives to a period later than the Freshman year). "After the youth has developed awhile in his new surroundings, has adjusted himself to them, has learned from experience in them how matters pertaining to study go, and what the different courses opening before him are, then, and not till then, should he be summoned to the grave task of deciding. It is better, too, that he should be introduced gradually to the responsibilities of deciding."

All arguments against the classics and in favor of the sciences and the so-called useful studies fail to convince me that there is any discipline better than that derived from the classical course as the basis and preparation for the prosecution of advanced studies of whatever

kind or nature. Many scientists admit the truth of this statement, and I believe the number is increasing rather than diminishing. We are all familiar with the Berlin experiment. Whatever opponents may say to weaken the force of this experiment, it stands an irrefragable evidence of the value of the discipline and knowledge of the classics as a preparation for scientific as well as linguistic studies. This admission from the scientists rests upon, at least, two valid reasons. First. A few years in early life devoted, in great part, to the classics and elementary mathematics, produce such a power of concentration and application as can be acquired in no other way. Secondly. The information gained by these studies becomes an invaluable aid in the acquisition and understanding of other studies.

Opponents to the classics do not deny these results, but find fault with the methods of instruction, and claim that these results can be secured in other ways as well. Herbert Spencer says: "We conclude, then, that for discipline, as well as for guidance, science is the chiefest value. In all its effects, learning the meaning of things, is better than learning the meaning of words. Whether for intellectual, moral, or religious training, the study of surrounding phenomena is immensely superior to the study of grammar and lexicons."

They declare that the results attained in the classical course are not essential to the pursuit of other studies. For a few specially gifted minds this may be true: We cannot, however, legislate in educational matters, any more than in civil affairs, for a small minority. The great majority of young pupils on the way to higher education have no aptitudes or powers of close application. They have good talents, but they must be trained and developed,—not for a career marked out by nature,—but for such a career as shall be opened to them by their circumstances and by their preferences when well advanced in their education. Hence, arises my firm belief in the necessity of a prescribed course in elementary training. I mean by "elementary," all that is included in preparation for college and, I am inclined to add, the first year of the college course. Beyond that there should be entire freedom.

But the optional or elective system will not be confined to this boundary; in fact, it has already passed beyond. Not only do we find it in the Freshman class, but, to a large extent, in the requisitions for admission, at least to one college. In 1877, or '78, the authorities of Harvard College issued a circular to the preparatory schools, announcing a marked, but not radical, change in the test for admission. This test was generally accepted by those schools which send a majority or a large proportion of their graduates to Harvard. Though there was an option for a few years between the

new and the old test, yet the old soon disappeared and is no longer allowed. The one presented as an alternative, and the only one now in use, required a certain amount of English, Latin, Greek, Mathematics, French, (or German) Ancient History and Geography, and Physics, which are designated as the minimum requirements. There are besides four maxima, viz.: Latin, Greek, Mathematics and Physical Science, of which any two will be accepted. While a certain degree of option is allowed, these requisitions do not conflict with those of other colleges. Other colleges have adopted them in part, and I do not think any college would reject a student who could pass the Harvard examinations, though one or two conditions might be imposed on as many unprepared subjects. The schools adopted this plan with no inconvenience, and without increasing the expense of tuition and, so far as I know, are pleased with it, and would not abandon it except from necessity. The change appeared to be a concession to the advocates of the "New Education," and to those schools which could, or would, not carry the ancient languages so far as the old system required. It has not materially increased the number of fitting schools and the number offering the maxima of Mathematics and Physical Science without Latin and Greek has been small; neither has it materially affected the instruction of the non-fitting schools. It has materially affected the methods of instruction in the preparatory schools. But the words "optional examinations" in the subject of our discussion this afternoon have rather a prospective than a retrospective meaning. The teachers of secondary education are apprehensive, or some of them are, that the majority of one college Faculty, if not more, will make not only a marked but a radical change in the requisitions for admission.

In June, 1884, the Faculty of Harvard College sent a printed circular "to the heads of schools which regularly send boys to that college," requesting criticisms on two plans proposed as tests of admissions. This criticism was to be made in writing, and in a personal conference with a committee of the Faculty consisting of the President, the Dean and nine professors. It is not pertinent to make any report of the views expressed at the conference, but the plans are proper subjects for consideration, especially as they have been reported to the public by the newspapers. One plan was almost entirely elective, and the other prescribed, in requisitions nearly equivalent to the present minimum requirements, including, also, German. One plan offers admission, matriculation and the degree of Bachelor of Arts to a candidate who has no knowledge of Greek, and a very slight and elementary knowledge of Latin—considerably less than the present minimum requirement. As Latin

and Greek are now electives at Harvard, the degree of A. B. would be granted without Greek and with the little knowledge of Latin gained in a part of the preparatory course. It has been reported that this plan has received the approval of the Faculty with very few dissenting votes. But it has encountered the earnest protests of other Faculties, and has not yet received the sanction of the Board of Overseers of Harvard, if that is necessary.

President Warren, of Boston University, in the last Annual Report, says: "During the year that has elapsed, the doctrines of the so-called 'New Education' have made no apparent progress, and there is ground for hope that at the hands of so learned and able and traditionally conservative body of men as the Overseers of Harvard University the degree which more than any other stands for truly liberal and catholic scholarship—that of Bachelor of Arts—will still find effectual protection."

The following paper, signed personally or representatively by the Presidents of Yale College, Brown University, Dartmouth College, Williams College, Amherst College, Trinity College, Wesleyan University and Boston University, was respectfully presented to the Overseers of Harvard College, and by them referred to the same Committee to which the proposed requirements had been referred.

To the Honorable and Reverend the Overseers of Harvard College:

Whereas, it appears from the public prints that your honorable body is soon to be called upon to consider a proposition so to modify the conditions of admission to Harvard College, and of promotion to the degree of Bachelor of Arts therein, that this degree will no longer be evidence that its bearer has been instructed in both Latin and Greek; and

Whereas, it is evident that the proposed change seriously concerns the bearers of this degree everywhere; and

Whereas, it is our clear conviction that the introduction of such a change in the conditions and significance of the degree in your institution would injuriously affect every classical college in America, and the work which they are now able to do for the cause of a truly liberal education;

We, therefore, the undersigned, representatives of the New England College Association, in which, from the beginning, Harvard College has been an honored participant, and with which the Harvard College Faculty has lately co-operated in the securing of more uniform requirements for admission to all our colleges, do hereby earnestly and respectfully request your honorable body not to approve of the proposed changes until after procuring a formal expression of opinion upon the subject from the leading colleges of the United States.

As true friends of the venerable and flourishing institution of which you have the oversight, and as in some measure jointly responsible with yourselves for the educational standards and work and reputation of our country, we venture to present this respectful request, and to hope that it will be received as evidence that in the fellowship of a common aim we are

Most sincerely yours,

[The signatures.]

Our interest centres on the plan proposed, which allows options throughout the entire examinations, except English compositions and a small amount of history,—a choice being offered even here between ancient and modern,—and elementary mathematics in case the advanced examination in this branch is not offered. This scheme presents six subjects, viz.: French, German, Latin, Greek, Mathematics and Physical Science, and the candidate may satisfy the requirements in any one of three ways. One of these ways is taking the advanced examinations in three subjects and the elementary examinations in one other. As there are three groups Greek may be omitted altogether. It is probable that Latin would be one of the subjects offered by nearly all candidates in its maximum requirement (though the minimum would be accepted), though a writer in a recent number of *THE ACADEMY* says that both Latin and Greek will go. Assuming that Latin will be retained, what will be the effect on preparatory schools? It is plain that those which are now preparatory must either extend their courses of study considerably so as to embrace all the methods of examinations, and thus open the schools to purely elective courses, or fix a prescribed course which would meet the requirements in one way. Doubtless the former alternative would be adopted in every instance, unless a limited income or a limited appropriation prevented. Endowed institutions would struggle to meet the demand by calling upon their alumni and friends for additional gifts and legacies. The strain upon private schools might be rather severe at first, but they would accommodate themselves to the new method either by continuing a prescribed course, or by an increase in the price of tuition, or in the number of pupils. The great majority of high schools in those cities and towns having but one high school, would probably exclude Greek and meet the requirements as best they might without that language. Therefore, while there might be at first some difficulty and inconvenience to meet the new order of things, there would be at once a larger number of schools which would become auxiliary to the colleges and a corresponding increase of candidates for collegiate honors. Many schools which pay little attention to the ancient languages would so combine an English or business course as to prepare the pupil for the counting-room and the marts of trade, and for college. It would also open the doors of those colleges which should offer this course of requisitions for many of the candidates who are now prepared for Technological institutions, and who enter them for a course of equal length with the college course. The secondary schools of Germany—the *Gymnasias* and *Real-schulen*—are as distinct in their courses as are the aims of their

pupils. The only question to be settled in early life is the choice of course. Also many of the great schools of England have this double course under one head. But the higher institutions which the pupils in these courses have in view are as distinct as our colleges and scientific schools. If Harvard college alone offers this option, the effect will be immediate and important, especially in this vicinity, and to a very large extent throughout the country. It is the oldest college in the United States and one of the most prosperous and influential, and receives nearly one-half of its students from beyond the boundaries of Massachusetts. It appears to me that the college or colleges which would make this offer of options would be invading the domain of technological instruction. But why should options stop with the six subjects named in the proposed plan? The following are some of the subjects demanding and receiving attention in the school and college curricula to-day: English, Latin, Greek, French, German, Italian, Spanish, Sanscrit, Music, Ancient and Mediæval and Modern History, Arithmetic, Algebra, Geometry—plane and solid—Logarithms, Trigonometry, Elocution, Logic, Psychology, Evolution, Ethics, English, French, German and Ancient Philosophy, Political Economy, including a History of Financial Systems and Legislation, Constitutional History of England and the United States, Painting, Sculpture, Architecture, Surveying, Navigation, Photography, Stenography, Telegraphy, Telephony, Physiology, Hygiene, Civil Government, Socialism, Descriptive and Physical Geography, Astronomy, Geology, Mineralogy, Physics, Botany, Zoölogy, Chemistry, Mental and Moral Philosophy, Religion, Anatomy, Biology, Pharmacy, Science of Teaching, Temperance, Calisthenics, Gymnastics, Military Drill and Industrial Training in all its ramifications. As the college and the technological school do not undertake elementary training, and as almost all of these subjects and some others are embraced within the courses of these institutions, they must or ought to be included in the preparatory work for colleges. This work cannot, of course, be definitely outlined, but must be a certain amount of elementary acquisition in any requisite number of studies selected at the will or whim or convenience of the pupil, his parents, or his teacher. Reliable judgment cannot be exercised in most cases, because there is not sufficient knowledge of the pupil's capacity or aptitudes, even in parents themselves. How often have we heard the remark made about sons of seventeen or eighteen years of age, or even older, and at the end of the college course, "I do not know what my son's adaptations are." Under such circumstances it seems strange indeed to insist upon a selection of studies for pupils from twelve to fifteen years of age from the

great range of subjects which are considered useful in some sphere of human experience. Professors in colleges are continually saying that it is not their province to teach the elements of their specialties, as it certainly is not. When the optional system for admission to college is once introduced, they will begin to say that students must not expect to enter their respective departments of collegiate instruction, which must be advanced in order to be dignified—unless they have gained an understanding of the elements in the preparatory or training school.

Some one may say, by way of objection, that the present scheme contemplates no such enlargement of the preparatory course, nor would the friends of the scheme assent to it. My answer is that every specialist—and such is every professor in a college—becomes an advocate of the great value of his subject in the range of human knowledge, and it would be extremely difficult to say where the line should be drawn, when the present classical method is abandoned. If I understand the purpose of this great change, it is to admit to an equality all students in every department of knowledge. At a certain point the student may be admitted to college, and at the expiration of that course the same degree shall be given to all.

This contradicts and nullifies the long established belief, which is still prevalent, that that training and development, essential for the acquisition of higher learning in any direction, to which the early and plastic years of youth should be devoted, are secured in the most effective manner by the course of study heretofore required for admission to the college, consisting chiefly of Latin, Greek and Mathematics. Some even deny that the object of early education is the training of the mind for higher studies, but assert that one subject is as good as another for the development of the mind, and the one which is most useful in practical life, is to be preferred. In my belief the preparatory school should be the place for training the powers of observation, application, memory and reasoning. (Our question this afternoon relates to the intellectual and not to the moral and religious culture of the pupil which will give you the reason why I say nothing about this most important part of a child's education). Much more care should be exercised in arranging and prescribing a course of study which is but the threshold of the student's career than a course which may be final, or preliminary to a short supplementary course which completes the education for some special career.

We have seen in our review that the partial options already offered have been accepted when it was necessary without difficulty and inconvenience.

In the proposed options the difficulty and inconvenience would be much greater. But without doubt the schools would adjust themselves to the situation. It would be a necessity and "necessity is the mother of invention." It has been predicted in this paper that the number of students, or subjects, in the preparatory course would be enormously increased within a period not very remote, when ancient languages become optional subjects in the requisitions for admission to college. It is true that these could be classified, and some schools could meet the test in one way, and others in another way.

But this would not be carrying out the intent of the system which is to allow each pupil to pursue that course of study to which he is best adapted and which will be most beneficial to him in after life. No town, and very few cities, could maintain a school in which each pupil should be ably instructed in whatever subject he might select from the great number, as his preference, for a preparation for college. There would be little inducement for the support of such a school as the number of pupils intending to enter college would be small compared with those who did not care to take so long and difficult a course. Hence the work of adequate preparations would be centred in a few large and abundantly endowed schools, and private schools with the charges of tuition materially increased. It would be a hardship to compel parents to send their children away from home and to expensive schools to gain that preparation which had always been so free and convenient; and it would also be detrimental to that part of our public school system which is regarded as a useful and important factor in the system, and which ought to be strengthened instead of weakened.

President Eliot says in his last report: "It would be a great misfortune for the college to lose connection with the public school system."

But the most serious objection to increasing the number of subjects in the requisitions and making them optional, lies in the fact that the more the student attempts and the less concentration he puts on his work, the more imperfect his preparation. This imperfection will be intensified by the lack of fixedness of purpose in a course of study from which so many selections can be made. Consequently the student will possess little power to grasp the intricate subject of the collegiate course, though he may have a good degree of general information. I think one can cite history to show that this is no picture of the imagination.

The older teachers present will remember when Reading, Writing, Arithmetic, Spelling, Geography and Grammar were the principal if not the only studies in the Grammar schools. These were taught

with a fidelity and thoroughness that seem almost pathetic in these days of universal knowledge. After a time a feeling arose in the minds of those who recognized the importance of other branches in elementary training, as a preparation for respectable living, that such a course was too narrow and did not meet the demands of the times. One subject after another was added till we have now, Music, History, Physics, Physiology, Anatomy, Hygiene, Book-keeping, Drawing, Sewing, Manual Training, Temperance and Calisthenics, in addition to the old fashioned subjects. Then, six subjects occupied the chief attention of the schools: now, eighteen. Vacations have been lengthened and the school-hours of the day lessened. The complaint is now heard so often that it seems to be almost universal, that grammar school graduates have only a smattering knowledge of a good many subjects, but have no definite and accurate knowledge of anything. Bank presidents and merchants declare that in the days of their boyhood, pupils of the public schools could compute interest and add columns of figures accurately. But now they can do neither. Hence, there is a disposition to declare the present school system weak and fruitless.

Why should not the same results follow from similar causes in a more advanced stage of learning? College instructors would cry out more vehemently than they do now, against the sciolism of the schools, though, I must allow, as a rule, they are generous in their estimate of our work and appreciate our difficulties.

I do not urge the continuance of the prescribed course simply for the sake of retaining Greek, or even Latin. I try to have no prejudices in considering this so-called Greek question. I am willing to allow that as a mere branch of knowledge, taken apart from its connection with other subjects, there may be many others equally or more important for the great majority of educated men in their practical life. When the conviction comes upon me, (and I am willing to be convinced,) that a prescribed course in which Greek or Latin, or both, are omitted, has been discovered or arranged which will impart to the student the same power to prosecute successfully the advanced stage of his education, I shall no longer advocate the retention of either of these languages.

But why such heartless and bitter denunciations of them in so many quarters where we should expect a more generous expression! A recent article in *Harper's Monthly* begins as follows: "It is the bane of this time, as of all previous ages, that education is regarded as a polite accomplishment merely, having very little to do with the real business of life. This superficial view is an inheritance from the Greeks and Romans, the curriculum of whose schools consisted

mainly of exercises of rhetoric and logic. The revival of learning 400 years ago was the renaissance of classicism. In the schools, proficiency in the languages of peoples whose institutions had long since perished, was made the test of scholarship. * * * * The struggle has been to supplant abstract methods of instruction by the introduction of object teaching. Progress was, however, slow, for the school-masters resisted stubbornly. And the speculative spirit, not only then controlled, but still controls, the schools of the civilized world. * * * The question is no longer—'Is there room in the schools for manual training, but is there room for the classics?' " Considering that less than one per cent of pupils in our schools ever look into a Greek or Latin book, the above is a high compliment paid to the influence derived from a knowledge of these same despised languages. But the paragraph was not meant for a compliment, but a denunciation.

The classics have stood the test for 400 years, and have accomplished great results. Men have been trained and are still being trained by these instrumentalities whose names are immortal for their achievements in literature, science, philanthropy and religion. They have been foremost in the progress of civilization. Men educated in this way do not despise the sciences; they recognize their value in the wide range of knowledge, and hail with delight every discovery in the phenomena of nature, especially if it adds anything to the sum of human happiness.

Let this spirit of impatience and contempt for the ancient languages disappear, and let the feeling of reciprocal regard take its place, and when the time comes, if it shall ever come, to write the epitaph over the departure of either Greek or Latin from the curriculum of the schools, as a prescribed study, let it be written in profound appreciation and praise for the good they have done the world in the education of men for many generations.

AMERICAN HISTORY IN PREPARATORY SCHOOLS.

GEORGE W. ROLLINS, A. M.

One effect of the centennial celebrations of Revolutionary events was to bring to the minds of our countrymen the fact that we have a history of sufficient importance to grow patriotic over, and that, though it is short in comparison with the history of the old-world countries, it does not yield to that history in its interest for humanity and the world's progress. The desire to learn more of our past, both remote and near, fills the air, and, as a result, books on the history of the United States are multiplying rapidly, and magazine articles on historical events, ranging from the achievements of the perhaps Corsican-born discoverer of America to the present time, are without number. MacMaster and Schouler and Fiske and von Holst and the western Bancroft are weaving the vast material at hand into sober history, while leaders and actors in the civil war are furnishing material for the future historian of that conflict, and other writers, both great and small, are working fields which together embrace nearly the whole area of our historical existence.

But not only is this interest in our objective history increasing, but also a feeling is growing that it is of immense importance and one of the means of averting several of the dangers now threatening our civil institutions, that this history should enter into the subjective make-up of every future citizen; that, as Mr. E. E. White has said, "every child born into the rights of American citizenship should be instructed in its duties and obligations", in the relation of the citizen to the State and the civil community; in a new word, in "civics."

Mr. Hailmann, having charged that the "inadequacy of the ordinary courses in history, current in our schools, is clearly revealed by the small influence exerted by our schools and colleges in the production of civic virtue, and by their notorious failure to stay the progress of civic blindness and corruption," has outlined a course of historical study, in which "civics" has a part from the beginning to the end of a pupil's school life.

The high educational value of history has won for it a place in the curriculum of the schools. Pedagogic principles demand that as, in Diesterweg's plan of historical study, German boys and girls should begin with German history, so American boys and girls

should begin with American history. Now public interest and the safety of the State demand that all public schools, fitting as well as non-fitting, shall do their utmost to inspire patriotism in their members. And it has been pointed out that the way to do this is to make the pupils familiar with the manifold events of their country's history; with the meaning of the principles that have been fought for and established by their fathers; and with the fact that in the evolution of governments, their own represents the highest development in the perfecting of Federalism. This done, they may be as conscious of the dignity of American citizenship as the Roman was of that of Roman citizenship.

So much for the public and pedagogic aspect of the case. We come now to the practical consideration of the subject of American history in preparatory schools, and at the outset three leading questions suggest themselves.

I. What are the preparatory schools doing with American history?

II. What are they reasonably expected to do?

III. What can they do to meet this expectation?

In answer to the first question their catalogues reveal the fact that the preparatory schools are either doing nothing or very little in the direct teaching of American history, although there may be much done indirectly by way of comparison and contrast with the history of Greece and Rome. In one prominent school the history of the United States shares with Geography three hours a week during a third of the fourth year, while the Constitution of the United States is given two hours a week for one term in the graduating class. In another school the subject is regarded as a tender to English, and Higginson's *Young Folks' History of the United States* is used as a reading-book three hours and a half a week for the first year. In still another, American history has no place in the course of study and is not even required of candidates for admission. An examination of the catalogues of other preparatory schools tells the same story.

The reasons for this state of things are not far to seek. They lie chiefly in the fact that the colleges generally either have not thought the subject of sufficient importance to require a knowledge of it from their candidates for admission, or have taken it for granted that the candidates know enough about it without the stimulus of an impending examination. The schools, taking advantage of this attitude of the college, and finding little chance to inject the serious study of American history into a course crowded with Latin, Greek, English, Mathematics, Ancient History, and Natural Science, have allowed the subject to lead an easy and precarious existence, and have bent

all their energies to fitting boys in those studies in which an examination is required.

The question as to what the preparatory schools may be reasonably expected to do in fitting boys in American history can best be answered by first discovering what the colleges themselves are doing in that subject.

A few years ago it would have been safe to say that for its work the college required no knowledge of American history from the entering students; for if the subject was taught at all in the college, it was taught only incidentally. No special hours of recitation, no special lectures were devoted to it. But now the case is far different. The colleges are yielding to the spirit of the times and are rapidly coming to appreciate the fact that a thorough and comprehensive knowledge of the principles which underlie our constitution and institutions is an essential factor in the make-up of intelligent citizens; that domestic problems are arising and are destined to arise in the immediate future, which it will require the most consummate statesmanship to solve; in a word, that Gladstones are to be our leaders, and not O'Neills.

Hence nearly all the colleges furnish a course covering some part of the history of the United States. Harvard has courses in the Constitutional Government of the United States, the history of the North American Colonies and their growth into a Federal Union, and the constitutional and political history of the United States from 1789 to 1861. Yale gives two hours a week to American colonial history to 1765, as contained in Lodge's short history; the history of the United States from 1765 to 1865; and the history of New England to 1689. Amherst, in the last term of Senior year, furnishes a course in the constitutional history of the United States. At Williams the student may study in Sophomore year as much as is contained in Gilman's "American People," and in Junior year the constitution of the United States. At Brown a course is given in Senior year, consisting of lectures on the evolution of constitutional government in England and America, with studies in Bancroft and von Holst for the American part. Wesleyan gives the Juniors instruction in the constitution, and the Seniors instruction in those parts of our history of which Hamilton and Webster are the centers. Here the scope is very wide: Constitutional, political, and economical questions are chiefly considered. The lives and writings of eminent statesmen are studied as far as time will allow. The whole question of the shaping and preserving of the government is discussed. Some parts of "The Federalist," "The First report on Public Credit," The "Argument on the Constitutionality of a National Bank," and

the "Report on Manufactures," are read in the study of the Hamilton period, while speeches of Webster, Clay, Calhoun, and Seward are examined for the Webster period. The fact that 28 Seniors out of 42 take this course is an evidence that it is a popular one. At Colby the elements of United States history are required for admission, and in Senior year the constitutional history of the United States is studied in von Holst, the aim being, as the catalogue sets forth, to make "this department contribute as fully as possible to the fitness of the student for the discharge of the obligations of citizenship."

These cases suffice to show the range of college work in the history of the United States. The subjects are largely political, constitutional and economic. The methods of instruction of course differ widely. In some cases it is wholly by lectures in which the student holds as much as he can and is left to himself to pursue further investigations. In others the student is required to memorize the Constitution of the United States, and discuss each clause historically and in its import in the presence of an instructor. And again the sources of history are studied to a limited extent, and the results of such individual investigation are determined by frequent examinations. There is, however, a marked tendency, wherever the apparatus is at hand, towards the so-called university or historic method; towards the skillful direction of individual investigation of original sources, or sources which for the student may be considered original.

From all this it follows that, considered apart from the public interest and the principle upon which it justifies its existence, the preparatory school has a duty to perform to the college in the matter of American history, and that the college, from the standpoint of the work it is doing, makes certain tacit demands upon the preparatory school. These demands are:

First, that the boy shall enter college with an impulse towards the deeper study of the principles, constitutional, political, and economic, which underlie and are taught by his country's history; that he shall come with the feeling that, with all his gettings, he will not have got the most from his college course, unless he shall have obtained that which will make him a more intelligent citizen, understanding certain forces that have operated in the past, and trained to see how certain forces at work now will result in the future; that he shall come having in mind, dimly perhaps, that the future is big with questions, the solution of which will require the wisest statesmanship and a high degree of civic intelligence.

Second, that those who elect the college course in American his-

tory shall have a ready knowledge of the main events since 1765, together with their causes and results ; a familiarity with the lives of those who have played the most important parts in the last century and a quarter of our history ; a comprehension of the wonderful development of the United States in all its activities ; and an acquaintance with some of the economic problems that have sprung from that development.

Third, that the student shall come with the habit formed of supplementing his text-book from other sources, and so having a more or less wide acquaintance with standard authors.

These are the tacit requirements of the college. How can the preparatory school meet them ? I will take up the points backwards.

First, as to the use of the university method in the preparatory school. So strong is the drift towards this scientific method of historical study by way of individual investigation of original sources, so great are its attractions and so happy its results as set forth by those who have employed it in the universities, that an attempt is making to apply the same method to historical instruction in secondary schools. The advocates of it claim that it is the only method by which a deep and abiding interest in the study of history can be aroused ; that constant drill upon the text-book by question and answer and topical recitation is perfunctory and will make a boy hate history ; that it is the teacher's part to arouse in the boy a curiosity, and then to guide, help and encourage him in his search to satisfy it ; that if, for example, the topic is the mound-builders, the teacher will first make the pupil curious to know who they were, where they lived, what they built, what was the use of the mounds, what are found in them, what is learned from them, and when the strange people lived ; that then the pupil, filled with a desire to know, may be sent to his books, his original sources, not, to be sure, to books as a whole, but to a page here and a page there, to a chapter here and a chapter there, that he may not be diverted from his investigation by irrelevant matter, and so lose interest in his subject by dissipation ; that in this way a pupil will not grow weary, for a pupil never wearies of what interests him, but will get that delight which comes from discovery and the feeling that something has been won by effort ; and that such an experience will be an inspiration to further investigation.

Plausible as this method seems, it is not practicable in the teaching of American history in preparatory schools. It demands a more extensive historical apparatus and more time than the preparatory school has at its disposal, and presumes a maturity which the pupils in American history have not reached. If the university method is

to be applied in fitting schools where the time is limited and the ability of the pupils to investigate, select and digest for themselves, is small, it is probably in the direction marked out by Miss Sheldon in her "General History." That is, the text-book in use must contain the original sources, by means of which the pupil is to be initiated in a small way into the so-called scientific method. But such a book is not at hand, nor is it likely to be. The teacher himself, therefore, must to a great extent be the original source, and by his enthusiasm, magnetism, and fullness, and by frequent reading from named authorities, inspire in the pupils that impulse which by the university method is given by bringing the students in contact with the original sources themselves. So much can be done in the preparatory school, and the college can expect no more.

Second, as to the amount of work tacitly required by the college, my experience in preparatory schools enables me to pronounce it feasible, even with the present somewhat crowded curriculum, to give boys in American history an adequate knowledge of the chief events since 1765 with their causes and results, of the lives of the leading men of affairs, of the development of the nation's activities, and of some of the simpler economic problems that have called for solution. If the college should declare its opinion by an entrance examination, or if the preparatory school wished to quiet its conscience stricken by the fact that a knowledge of the salient parts of American history is as necessary an element in the education of an American citizen as is the knowledge of the history of ancient Greece and Rome, the school would find a way and time to fit boys in that subject. To effect this it would only be necessary to transform a course in history in which only some book like Higginson's is to be read, into one embracing the serious study of such an admirable work as Professor Johnston's History of the United States, the aim of which is to "group those events which seem likely to shed light on the responsibilities of the citizen to the present and future, and to give the student the light in connection with the event," and which recognizes the fact that "the typical school-boy must get his political, economic and financial education from his school-history of the United States, if he is to get it at all." I feel certain that the study of such a book four periods a week for one year, or better two periods a week for two years, in the lower classes, with a review during one term by the graduating class, would produce gratifying results and send boys to college better equipped for the further prosecution of those studies which bear upon the duties and obligations of American citizenship.

To supplement the work just outlined, it would be well if there

could be put into the hands of the pupils as a reader, a volume or two, containing the biographies of those men who have been most prominent in shaping the affairs of the last century and a quarter; not such biographies as men would find most delight and profit in, but such as would be suitable to boys and girls of preparatory-school age. I mean such a book of biographies as Mr. Higginson or Mr. Coffin, or Mr. Scudder could write, to judge from the books for young folk they have already written.

As to the college requirement that the student shall come with a desire to gain a wider and deeper knowledge of the constitutional, political and economic history of his country, enough has been said to show, at any rate it is an obvious fact which needs no setting forth here, that this result depends, not only upon the interest inherent in the subject itself, but also, and to a large extent, upon the spirit of the teacher. It only remains to add that, as a result of the impulse so formed, the *How* of subsequent study in American history will take care of itself.

*THE MASSACHUSETTS ASSOCIATION OF CLASSICAL
AND HIGH SCHOOL TEACHERS.*

The Nineteenth Annual Meeting of the Massachusetts Association of Classical and High School Teachers was held in Boston, on Friday and Saturday, April 9 and 10, 1886. Mr. John Tetlow presiding.

The first paper was on "Methods of Teaching History," by Miss Katherine Coman, Wellesley College. The following is the substance of what she said: In order to discuss methods of teaching history, it is necessary to understand first what history is, what educational results are received from its study, and how far these results can be attained in high school work.

History is the study of human experience, the purposes, strivings, and achievements of past generations. A knowledge of it is essential not only to the right comprehension of contemporaneous history, but also to the appreciation of the tendency and destiny of our present civilization. The experience of the past furnishes hints for the solution of present problems as well as a means of testing the projects and panaceas of present theorists, and enables us to make a truer estimate of our own times, even when we find no exact analogy. The student of history, trained to view human passions and aspirations impartially, acquires the ability to judge the move-

ments of to-day calmly and temperately, and learns to see in the most wrongheaded and dogmatic an honest purpose and right intent. But more than political precepts and worldly wisdom, history teaches the deeply moral lesson that right is eternally right, and wrong eternally wrong, and, in the light of the development of the human race, makes room for a well-grounded optimism, a deep-rooted faith in the power that works for righteousness.

But how can these treasures of wisdom be brought within the reach of the pupils in our public schools? Only a beginning can be made. But these three results ought to be secured:

1. An eager interest in the study of history;
2. An accurate knowledge of the outline history of the periods selected for study;
3. Some conception of the deeper meanings of history and its vital connection with present life.

These results can be secured by enlisting the pupil's fancy, imagination and unfagged memory, and by taking advantage of his developing reason to give him a familiar acquaintance with the sequence of events, and at the same time the process of that sequence, together with a comprehension of the great issues at stake.

A canvass of the Freshman class at Wellesley shows that of the 94 members, 46 place history among their three favorite studies, either because they "are interested in it," or it enables them "to understand contemporaneous history and to converse intelligently," or they delight in studying the development of nations and of human civilization. The reasons given by those who dislike the study of history indicate the defects of high school training. These are:

- (1.) Hurried work;
- (2.) Memorizing dates;
- (3.) Great attention to battles, campaigns, constitutional details;
- (4.) Exclusive use of dry text-books.

The first defect comes from an attempt to cover too much ground. Ante-collegiate historical work should be limited to the study of United States history, which possesses the prime merit of simplicity, deals with forms of life familiar to the pupil, and, by being completed to the present, brings home to him the fact that history is simply the record of antecedent life; and to the study of Greek and Roman history which is reasonably taught in connection with the classics. Better thus to enable a pupil to understand and enjoy certain limited periods of history, leaving some fields unexplored, than to attempt to teach him universal history.

Instead of memorizing arbitrary dates, and military and constitutional details, the pupil should have the order of events presented

to him, by means of tabular views, so simply and graphically that it will be retained in memory without conscious effort. Historic accuracy should depend not so much upon the memory as upon the artistic sense of the incongruity of an anachronism. The objection to the regressive or grouping method lies in the fact that it sacrifices the readiest means of making the student familiar with the historic outline.

Text-books should never be memorized, and rhyming histories are little less than criminal. The opposite extreme is entire reliance on oral instruction. The best method is a combination of the two. A text-book should be used to give the pupils a clear, orderly, and adequate presentation of the subject, a more definite conception, a better grasp of the issues involved. Then they should be referred to different authorities and bring to the class-room the diverse and sometimes contradictory statements. Here the teacher must arbitrate between opposing views, explain conflicting statements and emphasize the salient points. The advantages of this method are:

1. That the student gains a familiarity with books and authors;
2. That he learns to view historic facts critically, broadly, impartially, and from different points of view;
3. That he has a more lively interest in his work.

The defects of the oral method are that it lacks accuracy, clearness, proportion; that exclusive reliance on a teacher's presentation is no better than exclusive reliance on one book. Its advantages are that it gives room for the explanation and modification of statements, a less formal and therefore more comprehensible presentation, and permits the imaginative and reasoning powers of the novice to be aroused through the voice and face of the enthusiastic teacher.

The successful application of the new and best method requires a good library; historical maps and chronological tabular outlines to show place and time relations; photographs of places, buildings and historical characters; casts and antiquities; and original material found in the literature of the people studied. Of this method Sheldon's "General History" affords the best example. But behind the book must be a teacher who is himself an enthusiastic student of history.

The next paper was on "Industrial Education," by Albert P. Marble, Supt. of Schools, Worcester. Benevolent people and philanthropists, he said, seeing the wide-spread influence of the public school system, attribute to it the divine power of reforming society, and endeavor to incorporate into it a remedy for every social evil. If the children are taught the evil effects of alcohol and

narcotics on the human system, they say drunkenness will cease in the next generation. But there is danger of going too far. When every one of these subjects shall have been added to the school curriculum, it will embrace every interest of society, and a system so loaded will break down of its own weight.

High schools are a necessary part of the public school system. But, however valuable they may be, they are maintained against the protest of a considerable part of the community. When the great cost of these schools is further augmented by expensive free text books, and when it is still further proposed to conduct them by night as well as by day, the question will soon arise whether they may not be abandoned altogether.

A sewing school is useful; a cooking-school makes a forcible appeal; a carpenter's shop is excellent. But the utility of a particular kind of instruction is one thing, while the wisdom of attaching it to the school system is quite another question. Boston, the wealthiest city in the commonwealth, has reached the limit of indebtedness prescribed by law. But if every child in Boston is to be instructed in some industrial pursuit, as it is now taught intellectually, either the amount, nearly \$2,000,000, raised now annually for schools must be doubled, or else a part of the present system must be pulled down to make way for the new.

Manual training is advocated on the false assumptions that the public schools are responsible for all the evils of society, that the system of education heretofore pursued is a failure, and that manual training is the all sufficient remedy of all social evils, if only it can be firmly fixed in the public school curriculum. All these positions are untenable. Public schools have only a limited responsibility. They have performed their part well. Manual training is no such panacea as its enthusiastic advocates believe. The sphere of the school is intellectual training, and to hold the school responsible for all social evils and all moral delinquencies implies a blind worship of the school system. To add to the proper work of schools the whole of moral training, and then to superadd a thorough preparation for the business of life, is to cripple the school in its appropriate sphere, and to fail in the impossible labor thus to be assigned. The claim that manual training alone can result in the discovery of truth, destroy selfishness and promote Christianity, is without foundation. This change from the intellectual to the material is a reform backward; it is an attempt to revive the training of Sparta and of the North American Indians. Intellect, not matter, rules the world, and secures all the advances in civilization. Manual training, as an educational movement, ends in materialism.

Edwin P. Seaver, Supt. of Schools, Boston, in discussing this paper,* maintained that Mr. Marble had not put the case fairly; that the aim of the advocates of manual training is not to reform school instruction, not to pull down any part of the present system, but simply to provide means for training the minds of the pupils through observation; and that manual training so understood is only another step forward in carrying out the principle in accordance with which pupils perform experiments in the chemical and physical laboratory, instead of having them performed by the teacher, or reading about them in books.

The third paper was on "English in Preparatory Schools," by J. B. Taylor, Berkley School, Boston.

It is a subject for congratulation, he said, in the first place, that English is really in the preparatory schools and demanded by the colleges. Fifteen years ago no demand whatever was made by Harvard concerning English, while now, for 1888, she requires knowledge of eleven different works by eight different authors, a fact which leads us to question, in the second place, if she is not demanding more than can be well digested by boys before they reach the college age. The other colleges that have followed Harvard's lead, but stopped with about eight works by five or six authors, seem to have acted more wisely. Considerable variety in works rather than in authors would conduce to good results in the preparatory schools. Shakespeare, Scott and Irving, the great poems of the greatest poets, and criticisms upon them by the great essayists, indicate very nearly the limit beyond which it may be dangerous to go.

An article on English in the schools by Prof. Hill, of Harvard, in *Harper* of last June, complains that in thousands of compositions offered by applicants for admission, not one hundred were creditable to writer or teacher; few were very bad, few very good; a tiresome mediocrity pervaded nearly all. What else but tiresome, respectable mediocrity ought to be expected from boys writing for one hour only on one of a few subjects just presented from nearly a dozen books, which they must remember clearly amid all the worry, haste and uncertainty of those fateful days? One wonders more are not shockingly *bad*. Practice in writing as a means of expression, not simply as an end in itself, from the primary grades up, is the only way to free a boy from the mechanical difficulties of composition.

Books like *Ivanhoe* and *Kenilworth* can be read with special interest and effect in connection with the study of English history or

*In our accounts of the meetings we give prominence to the discussions only when the speakers combat some position taken in the written papers. Where no discussion is indicated the reader will understand that the speaker voiced the sentiments of the association.

epochs. Macaulay's lays likewise may brighten the study of Roman history. At least two, and better three, years should be given to the gradual digestion of the full Harvard course, not necessarily confining three years to those books alone; for a teacher may, in teaching English history or literature, wish to introduce some works not required at Harvard.

Mr. Byron Groce, of the Latin School, Boston, discussing this paper, also criticised Prof. Hill's charge of mediocrity. Calling to mind another assertion of Prof. Hill that boys would write well if taken on their own ground, he said that boys are manifestly not on their own ground when writing on set subjects in an examination. As to the number of works and authors demanded at Harvard, he did not think the requirement excessive as long as the examination consisted of the writing an essay on some subject taken from them, and the instruction was rather in the spirit of the works than in the details of sentences.

Mr. Geo. E. Gay, of the Malden High School, opened the session of Friday afternoon by conducting a "Class Exercise in Book-keeping." Book-keeping, he said, should be so taught as to secure the best results in mental training and practical knowledge. The first depends upon such a method as will lead to vigorous, independent thought; the second, upon long continued practice in writing up in proper form supposed business transactions. The best transactions for practice are those made by the pupil himself. As soon as he has learned to manage a form from his text-book, he should be supplied with money, merchandise, a bank pass-book, record books, etc., and so set up in business. By this method the subject is made real and attractive, and the details are impressed upon the mind. At the same time with book-keeping, penmanship, commercial arithmetic, and the more common applications of commercial law should be taught. Mr. Gay illustrated the details of the "actual business" by a class from his school.

Mr. William C. Lawton, of Cambridge, then read a paper on "The Great Tripod at Delphi," (Herodotus, IX, 81), of which the following is an outline:

The lovers of Greek studies are coming to feel that they have given comparatively too much time to the literature, and too little to the artistic remains. The study of buildings, statues, inscriptions, etc., brings us into the most direct contact with Greek life, and constantly throws light also on the meaning of the ancient authors.

On the site of the ancient Hippodrome in Constantinople stands, half below the present surface, a bronze column, formed of three

serpents intertwined. The inscription, discovered by digging out the base, gives in early Dorian dialect a list of thirty-one Greek cities, under a brief illegible headline, which seems to begin 'Απολλωνι Σεφ̃. Herodotus, Thucydides, Plutarch and Pausanias, describe or mention a "great golden tripod, resting on a three-headed snake," dedicated at Delphi by the Greeks after Plataæ. The exact number of states, thirty-one, is mentioned in Plutarch's Themistocles. The golden part was stolen in the Phocian war. An unknown scholiast on Thucydides, and several Byzantine chroniclers, agree that the bronze standard was carried off by Constantine, and set up in the Hippodrome. The conclusion seems irresistible that the two objects just described are identical. We have therefore a precious historical record, a generation older than Herodotus' history.

The monument is in a lamentably ruined state. The heads are all missing (except one fragment in a museum of the city), though seen as late as 1717 by Lady Montague and other tourists. It is disputed whether the serpents were themselves the "tripod," and supported the golden bowl directly, or merely the standard on which the tripod proper stood, resting either on their heads, or upon a slab which they supported.

The form of the monument may have been suggested by the earliest legend we have concerning Delphi; the story of the struggle of Apollo with the Python, told in the Homeric Hymn.

A complete account of the monument, by Dr. Otto Frick, may be found in Jahn's Jahrbücher, third supplementary volume, (1857-60) pages 487-555.

Then came a short paper by Geo. W. Rollins, Latin School, Boston, on "American History in Preparatory Schools." (Given entire, page 133, *et seq.*)

A paper by Miss Caroline E. Swift, High School, Medford, on "English Literature in High Schools," was directed against the use of annotated editions of the English authors. She claimed that they gave no opportunity for training pupils in the habit of consulting reference books, cyclopedias and dictionaries, and of working out the author's meaning unaided. She approved Richard Grant White's advice—"Don't read any one's notes; don't read mine; read the author."

We give entire, pages 121-132, Dr. Merrill's paper on "The effect on Preparatory Schools of optional examinations for admission to College," which followed.

President Eliot, of Harvard College, discussing this paper, said that he found much in it to assent to. He agreed with Dr. Merrill

that there is a decided set of public opinion both in England and America towards the optional system, towards a wider range of subjects in which boys may present themselves for examinations for admission to college. He declared himself also in accord with the essayist, in regard to the abuse of Latin and Greek, which had somehow got mixed up with the Latin and Greek question. He himself had never said a word against the disciplinary power of Latin and Greek studies. His contention was simply that, while the study of those languages may be the best for some minds, it is not the best for *all* minds. On the other hand he did not believe that the optional system would conduce to superficiality; for it is not expected, nor will it be true, as can be shown by evidence already collected, that students will spread themselves over a great number of subjects or the easiest ones, but rather that they will concentrate their energies upon a few. So the new system will be characterized by thoroughness and not superficiality. Under the present arrangement of different prescribed courses of study in preparatory and high schools, he said that the parent is obliged to decide which course his son shall pursue, when the boy is only some twelve years old and his aptitudes cannot be determined with certainty. If the parent chooses the high school course, and discovers, when his son is sixteen or seventeen, that it would be wise to send him to college, he is obliged now rudely to break the continuity of the boy's work and put him to those studies which alone will lead to college. Under the new system there would be no such disturbance. Instead of only one route to college there would be several converging to the same point; and whichever one a boy started out upon would, if pursued to the end, bring him to the university. President Eliot also pointed out that under the present system the high schools are not in that close relation to the college contemplated by the State in establishing them; for the high schools have not been able to manage two courses; a regular high school course for the many, and a preparatory course for the few. But under the optional system, whatever course the high school should adopt would also be a preparatory course, and so the high schools would be brought into close connection with the college—a connection which it would be unfortunate for the college to lose. As to making the studies of Freshman year required, he said that he would like to see them all optional; for in the eyes of both the instructors and students, a required study suffers a degradation. No instructor likes to have a class in a required study. But for some time to come English and the modern languages will have to be prescribed in Freshman year.

Dr. Bancroft, of Phillips Academy, Andover, also discussed Dr.

Merrill's paper. He thought that private tutors and the very large schools in which it was necessary to form separate sections, would find relief in optional examinations; but the middle schools, he said, were sure to suffer from increased burdens, unwise choice and frequent changes on the part of pupils and their parents.

At the business meeting held Saturday morning, the following officers were elected for the coming year:

President—John Tetlow, Girls' High and Latin Schools, Boston.

Vice-Presidents—Charles M. Clay, Roxbury High School; J. W. Macdonald, Stoneham High School; Samuel Thurber, Milton Academy; A. L. Goodrich, Salem High School.

Recording Secretary and Treasurer—W. F. Bradbury, Cambridge Latin School.

Corresponding Secretary—Byron Groce, Boston Latin School.

The following resolution was then passed, thirty-one voting for it, and none against it:

"*Resolved*, That, in the opinion of this Association, a State tax assessed on all taxable property and redistributed in proportion to school population, would tend to equalize the burdens of education and benefit the cause."

After the business meeting, Mr. W. C. Collar, of the Roxbury Latin School, gave the report of the Committee on Coöperation between the Teachers of Preparatory Schools and the Faculties of Colleges.

At the meeting of the Massachusetts Association of Classical and High School Teachers a year ago, resolutions were unanimously passed, after full discussion, setting forth the need of coöperation between our secondary schools and colleges, and a committee, consisting of Mr. Tetlow, head master of the Boston Latin school for girls, Mr. William C. Collar and Mr. Ray Greene Huling, principal of the Fitchburgh high school, was appointed to see what action could be taken in furtherance of the wishes of the convention, as expressed in the resolutions. That committee, after personal conference with several college presidents, decided to invite by letter representatives from all the New England colleges and about twenty-five prominent principals of preparatory schools to meet in Boston on the 17th of last October, for the purpose of discussing the relations of the schools and colleges, and also, if it was thought advisable, to form a permanent organization for the promotion of their common educational interests. The proposal for such a convention met with hearty and almost unanimous concurrence on the part of those addressed, and meetings were accordingly held on the 16th and 17th of October, 1885. Most of the New England colleges were represented, in a majority of cases by their presidents. The

following questions were discussed: How can the preparatory schools coöperate more effectively with the colleges? Is any greater degree of uniformity in requisitions for admission to college practicable? What are some of the most prominent and prevailing defects in the preparation of candidates for college? Under what conditions might admission to college by certificate be permitted? The discussion of these questions proved very interesting and valuable, and a permanent organization was effected. The following resolutions were then adopted by the convention:

I. *Resolved*, That the conference of college presidents, principals and teachers in preparatory schools earnestly appeals to the colleges for concerted action on their part in order to secure uniform requisitions in all subjects and authors in which they have a common requirement.

II. *Resolved*, That this conference urge upon the colleges a still closer agreement on their part as to the subjects to be set for examination, the recommendations to be made to the schools, and the nature and extent of the entrance examinations.

III. *Resolved*, That this conference request the colleges to make seasonable announcement of any changes in the requirements for admission.

IV. *Resolved*, That this conference request the colleges to unite in prescribing definitely the subjects which may be offered at the partial or preliminary examinations, the minimum number for which a certificate will be given, and to decide whether a final examination may be converted in any case into a preliminary examination, or a preliminary examination into a final examination, and if so, on what terms.

V. *Resolved*, That this conference urge upon the colleges coöperation and comity, either in accepting each other's certificates of examination or in establishing jointly an examining board whose duty it shall be to set papers, conduct examinations, and issue certificates on their behalf, which certificates shall be good in any college in the syndicate.

So strong was the interest felt in the objects of the convention that a committee of three was appointed consisting of Dr. Bancroft of Phillips Academy, Andover, Mr. Collar and Mr. Tetlow, to lay before the Association of New England Colleges, to meet on the 27th of October, at Dartmouth, the above resolutions.

The result of the hearing at Dartmouth was that 13 colleges united in the establishment of a commission on admission examinations, each college to appoint one member of the commission, and all the colleges of the syndicate to be bound by its action.

The first work of the commission is to bring about a greater degree of uniformity in admission requirements and to arrange for identical examination papers upon common requirements. It is hoped that the commission will go further and essentially alter the principle of

admission requirements, substituting a qualitative for a quantitative examination, making cram simply impossible, and leaving the teacher free to follow his own methods, only asking him to produce certain results, and his pupils to do something rather than to repeat something.

The commission was in session at Cambridge the very hour that Mr. Collar was making the above report.

Mr. William G. Farlow then read from his article on "The Teaching of Science," which he had already read before the Association of Naturalists, and which was afterwards published in the *Popular Science Monthly* for March, 1886. It needs therefore no further notice here.

The last paper of the meeting was by Miss Helen Magill, Howard Collegiate Institute, West Bridgewater, on the question, "To what extent are conversational exercises in Latin and Greek of value in elementary instruction?" The following is an abstract of what she said:

The word conversational is to be taken both in a broader and a narrower sense than the ordinary, as will appear.

The changes to be proposed are in form not very revolutionary, but they spring from a totally different view about language teaching from that which has largely prevailed.

The object of elementary teaching or of any kind of teaching of Latin or Greek is primarily the understanding and appreciation of the authors read and a feeling for their thought which is only possible to those reading their own words.

The mental drill of the grammar should be regarded as a distinct study and only taken up after a literary appreciation is thoroughly established. Classical scholarship has lost immensely by failing to recognize this.

The ideal way to learn any language is as we learn the mother tongue, without grammar or translation. But it takes children fifteen years' steady practice to learn the mother tongue, and that very indifferently, as observed in children of this age; therefore some compromise is necessary. The study of inflections and the use of the method of translation are not to be dispensed with in modern languages, much less in Latin and Greek.

There is no such thing as real translation; all translation is a makeshift. The object is to get into the atmosphere of the writer. For this the habit of reading without consciously translating must be cultivated by every means: by the system of translation the student does little more than break up the thought of the author into a

thoroughly alien form. It is good training in English, but for real mastery of a language it is the least effective method among all those to be employed. One of the main objects of teaching language, to enable the mind to be widened by a sort of naturalization in the life and spirit of another age or country, is almost lost by the pure translational method.

This false view of language teaching with respect to Latin and Greek has probably prevailed more or less ever since these languages began to be *seen* rather than *heard*.

To many pupils in translating, the Latin sentence is a mere symbol, guide-board or memorandum to recall the English phrase which was associated with it by the aid of the dictionary. This kind of training is the cause of the dropping of these languages by most students on leaving college.

I have heard a very distinguished teacher of a past generation say that the *last* thing to be thought of in working on a sentence was the sense. One may learn a good deal in that way, but he can not be said to learn Latin or Greek.

Latin and Greek are by far the best instruments for training the mind in grammar and its logic; but this training should not come first. Every language should be studied as an *art* before it is studied as a *science*.

The best thing about the regular system is the Prose Composition, but there is not half enough of that. Connected prose should be written more and not merely sentences illustrating grammatical points.

The word "conversational" indicates the highest form of the methods needed to give real appreciation and mastery of a language. But in its freest development it is probably not possible to many modern teachers.

The underlying principle of all the exercises to be recommended is that any language should be taught at first mainly through the *lip* and *ear*.

Conversational exercises in the form of question and answer on the subject matter of what is read are not impracticable, and if teachers have not the proficiency to manage these they should make it their first aim to acquire it.

It is very desirable to teach young beginners for some time with nothing but a book of accidents and a note book. If any one will try this, he will see how much more vivid is the interest taken.

The subject matter should be carefully chosen with a view to interest the student. Too much of the Gallic war is read in proportion to Roman history generally; poetry might be taken up much earlier.

Introductory books are not sufficiently coherent, attractive, or interesting. A good classical reading book for the youngest age seems to be needed; if this is not possible, the *Viri Romæ* gives a very vivid impression of Roman history in a form suitable to children.

In addition to the use of question and answer on matter read, much dictation is to be strongly recommended. A part of every lesson should be translated without book from the lips of the teacher.

Also new Latin or Greek should be read aloud and translated orally or in writing, assistance being given only by the suggestion of synonyms or more familiar turn of expression.

In long review, passages should be read rapidly and abstracts given orally or by notes taken during the reading or in pauses.

These methods added to the more strictly conversational method of question and answer, and in connection also with written composition and written translation at sight without aids, are recommended as the best means of gaining real mastery of a language.

One obstruction to the employment of these to a sufficient extent is the requirement of amounts of reading instead of ability to read by colleges and of too large amounts in consideration of the time which should be given to such exercises in proportion to translation.

SUMMER SCHOOLS.

W. B. HARLOW, PH. D., SYRACUSE.

Thoreau, the philosopher of the woods, thus accounts for many of the days spent in that sylvan retreat by the quiet waters of Walden pond: "Sometimes in a summer morning I sat in my sunny doorway from sunrise till noon, wrapt in a reverie amidst the pines and hickories and sumacs, in undisturbed solitude, while birds sang around or flitted noiselessly through the house; until by the sun falling in at my west window, or the noise of some traveler's wagon on the distant highway, I was reminded of the lapse of time. I grew, in those seasons, like corn in the night. They were not time subtracted from my life, but so much over and above my usual allowance."

But Thoreau believed in periods of physical as well as of mental activity, and his life was in no sense an idle one. Though practical people may not feel disposed to agree with him in all respects, his suggestions are often valuable. What more profitable, inexpensive

and altogether charming summer school could be found than some such resort as our philosopher's home in the woods? If we would walk through the world labelled and ticketed "pedagogue," let us by all means persistently close that wonderful book which kind nature has in summer presented to tired eye and brain, and bury ourselves alive among the little books which man has made.

The nobility of a teacher's occupation is a theme which is frequently sounded, particularly by teachers themselves. But we shall never impress the world with the dignity of our profession until nobility becomes apparent in our lives and characters. A member of our craft chanced to be aboard a train upon which was a bevy of teachers returning from an educational convention. They were talking shop as usual. Their minds were full of the new methods which they had just imbibed, and they were all eagerness to get a class into their clutches to practice upon. "Poor children! Poor teachers!" thought our listener, who afterwards confessed that for the moment she was actually ashamed of the name of teacher. The world justly estimates us for what we are worth. The "Autocrat of the Breakfast-table" remarks: "All lecturers, all professors, all school-masters have ruts and grooves in their minds into which their conversation is perpetually sliding." It is from these ruts that our summer vacations may happily deliver us. During these times of recreation the companionship of others of our own profession may be agreeable; but if this results in so narrowing our lives that no other topic but school can awaken our enthusiasm, let us for two months at least flee from one another as if we were in danger of catching the plague. No wonder that there are some who dread to have it known that they are teachers. They would not have it said: "We respect you in your place, but your place is in the school-room." If more than mere teachers we become men and women of wide culture and refinement; if we allow the broadening influences not only of books but of nature and humanity to enter our minds, not only our teaching but our whole lives will become inspired with new life, and the world will readily credit us with attributes which as yet we have rarely been found to possess.

In the consideration of summer schools the question of health also should not be forgotten. Some may be so constituted that with apparent impunity they may shut themselves into libraries, school-rooms and laboratories and delve from one year's end to the other. But are a majority of true teachers, after ten months of faithful labor in crowded rooms, in a fit condition to spend their vacation in brain work? Our teachers are possessed by the prevalent American mania. They feel that they must at once reach the goal of their

ambition or perish in the attempt. They would advance themselves in a specialty by attending summer courses conducted by eminent instructors in literature, philosophy and science. These leaders are generally enthusiastic teachers, but they forget that their pupils, occupying less elevated positions, have undergone a far greater strain of labor during the school year. All teachers, however well they may love their work, must agree that their calling is at best a laborious one. If we have inspired our classes, we must discover at the close of each day that so much of virtue has gone out from us. During the year the waste gradually exceeds the repair, and at the close of the term we must realize that we are not in the condition with which we began our labors. Vacations are established in recognition of this fact. We must have time to recuperate. It is true that summer schools are generally established amid attractive natural surroundings, but deceive ourselves as best we may, we cannot be free and our rest cannot be perfect as long as we remain in the workshop.

On the writer's return from a vacation spent in rambles through the quaint old island of Nantucket, he visited a summer school. Some enthusiasm was manifest, it was true, but many weary and listless faces were also seen, and many who were interested nevertheless appeared weary. The contrast of books, maps, deal-tables and dried botanical specimens with that summer day in its joyous abandon of

"Green dunes and dells and glimmery sweeps
Of seabeach, grooved with cove and creek."

was really too painful, and I was not at ease until I had escaped into the air and sunshine.

But how shall we spend our vacations with the greatest profit to mind and body? The world is wide. Many an independent wanderer with wallet and staff in hand has found pleasure and profit in such pilgrimages as time and purse will allow. With the autumn he has returned bringing a new body and a new mind to his labors. He wipes the dust from his books and sober work again becomes even welcome. None of us are too poor to worship with Thoreau at the shrine of nature. Any of us may spread our tents under the open sky and live for two glad months amid the genial influences of that sweet foster-mother whose lessons never weary the brain nor dim the eye.

NOTES.

THE ACADEMY is mailed to all subscribers promptly on the first of the month. Subscribers should inform us if it is not received within two days of the time it ordinarily reaches them.

We offer no apology for devoting our entire space this month to the meeting of the Massachusetts Association of Classical and High School Teachers. It is, so far as we know, the oldest and most important organization of secondary teachers in the country. The

Associated Academic Principals of this state represent more pupils, to be sure, but, since the membership is limited to principals, it is much smaller.

A letter from Principal Cheney, of Kingston, chairman of the committee on increased Regents appropriation, reaches us just in time for the present number. The bill appropriating \$60,000 has been favorably reported by the Ways and Means Committee, and its prospects in the legislature are entirely favorable. Mr. Cheney and his committee have fully demonstrated their energy and staying qualities, abundantly justifying the wisdom that selected them for the task. A telegram from Mr. Cheney, April 28th, announces that the bill has been ordered to a third reading.

Houghton, Mifflin & Co. have issued a dollar edition of Richard Grant White's *Words and Their Uses*. Few more valuable books are within the reach of pupils beginning composition work or learning to distinguish delicate shades of meaning.

In *Modern Language Notes* for April, Prof. H. S. White, of Cornell University, gives an excellent review of Schmeding's *Die Klassische Bildung der Gegenwart*. In these days when the war-horses are smelling the battle afar off and neighing fiercely for the contest, we cannot refrain from quoting with hearty endorsement the singularly happy words with which Prof. White closes.

"In this country, where few American youth are often accused of possessing too classical an equipment, where the requirements for admission to the learned professions are generally so lenient, and where the scientific wolf even threatens at times absolutely to devour the classical lamb, such a debate need become neither so acrimonious nor so prolonged. Waiving a decision upon many of these debatable points, points which only future experiments can settle, the fair demand of the times is for an equal opportunity and equal facilities for the pursuit of both ancient and modern languages. Under such an arrangement, which already prevails in some of our higher institutions, it is only incumbent upon the teachers of modern languages to endeavor to invest their courses with the same thoroughness of preparation and carefulness in detail which we have been accustomed to see applied to the study of Greek and Latin. The feigned aristocracy of the classics will then give way to a more democratic equality of ancient and modern tongues, the contest will resolve itself into a friendly rivalry, and the issue may be left to take care of itself."

Those who think there is only one side to the Harvard Election System—the rose-colored view presented by President Eliot—should read, "the System of Instruction and Government at Harvard College," by Samuel Brearley, Jr. This is a report of the subcommittee of a committee of eight gentlemen appointed to report to the Harvard Club of New York city concerning the working of the elective system as at present conducted in their *alma mater*.

One can hardly help being amused at the wonders of success claimed for this brief experiment, covering less time than the college course and severely criticized by many of the best students and professors. Up to a recent period the degree of A. B. meant some-

thing, not very much to be sure, but still it had the merit of being the only title which gave any clue to the character of the work it was supposed to stand for. There was a time once in England when the title "Mr." was restricted to graduates of the universities and commissioned officers in the army or navy, and as such it commanded some deference. Now it commands little more esteem than does "Colonel" in some parts of the United States. It can easily be said that in many cases Bachelor of Arts means little, but it should be the ambition of educated men to have it mean more rather than less.

If this were a question of the admission of men to college without Greek, or without any other one indicated study, we should be the last to speak. There is no such question. The best instruction in the land in every subject to-day is open to men of suitable attainments, without reference to their preliminary training, always provided they are able to go on properly with the work. It is not so much a question of what studies they shall pursue as of what degrees they shall receive at the end, and this question, as it most nearly concerns present bearers of the degrees, should not be settled as a matter in which they have no interest. Holders of a certain degree form, or should form, a sort of guild, and it needs little argument to show that the members of a guild should have some say as to the admission of new members. It is no answer to show how little this has been done in the past. The alumni, and not the students or even the instructors, should determine the conditions for degrees.

In a recent number of the *Rivista Pedagogica Italiana*, Giuseppe Sergi, Professor of Anthropology in the University of Rome, has an article that is very interesting as indicating the modern tendencies in pedagogy. Prof. Sergi shows that the classic psychology is unscientific because it contemplates psychical phenomena as completed wholes, and not in their elements or factors. This psychology bears no fruit for pedagogy. The latter science awaits the application of the new, objective psychology which laboriously observes and collects the outward and visible manifestations of the psychical life with the purpose of inferring the laws that govern the operations of the spirit. These laws do not yield themselves to meditation any more than do the laws of the physical universe.

Prof. Sergi recommends that every child on entering school be subjected to a minute examination, in accordance with a formulary which he suggests, the results of which should be a chart of the child's psychical nature and condition at that time. Such an examination should be held both at the beginning and at the end of each school year, until the child's fifteenth year or even longer. This cumulative map of the pupil's mental constitution should always, when he comes under a new teacher, be the guide to the methods and procedures to be adopted with reference to his treatment in the school.

At present a new class of pupils all have, to their teacher, one and the same intelligence a , one emotional nature b , one character c , one state of development d , and so on; while in reality all have an intelligence a^x , an emotional nature b^x , a character c^x , a development d^x , that is, a total of unknown value. All pupils will proba-

bly be treated wrong, if all are treated alike. Time is wasted and harm is done by leaving to each teacher to learn his pupils by his own unaided observation.

In the humor that shows itself in his very interesting article, Prof. Sergi makes it clear that he appreciates fully how utopian his scheme will appear to educators. Nevertheless his ideas contain the germ of the great reform in elementary teaching that everybody feels is coming in some shape or other. Many a teacher has of late, following the fashion, applied for light to the standard books of psychology, only to be utterly baffled and discouraged and filled with disgust at the monstrous pedantry now in vogue under the name of pedagogy. Only in the new, objective psychology,—or call it anthropology,—lies the hope of better things.

The annual reports of the Board of Education of the State of Massachusetts are always instructive to educators generally, but those of 1883-84 and 1884-85 may almost be called epoch-making from the fact that they inaugurate something like scientific criticism of the secondary schools and suggest the possibility of founding a special secondary pedagogy. Such a pedagogy exists in full maturity in Germany, but is as yet wholly unknown in America. The gymnasium has its literature,—its Nägelsbach, its Roth, its Schrader. No gymnasial teacher can afford to neglect these writers. The high school teacher has made no professional literature; no one else has made any for him, so far as he knows. He can be forgiven if he has not learned even to desire that the principles of his profession should be discussed in literary form. He can be forgiven even if he goes so far as to deny that his work is founded on principles, and to claim that it is altogether empirical,—a hit or miss in the dark.

Secretary Dickinson did well to carry into effect his happy thought to let Mr. George H. Martin, agent of the board, devote nearly a year to inspection of the high schools of the State, and to allow him 33 pages of his report for 1883-84, in which to present the results of his investigation. The result reminds us of the hardly larger *Meine Schulreise durch Norddeutschland*, by P. Benedict, an interesting contribution to German school literature, which has always suggested to us that the most attractive of journeys would be one through the high schools and academies of our own country. Mr. Martin was able to make very brief visits to somewhat less than half of the 228 high schools of Massachusetts. But he observed carefully, if not very widely; and, bringing to the work his normal experience and training, he perceived correctly the significance of what took place under his eye. Hence this little report, almost buried out of sight in the large public document, deserves consideration as revealing the kind of work that is doing in the public high schools of the community that has undoubtedly done the most for its schools of all the States of the Union.

Knowing that every Massachusetts city or town always does everything in its own way, and, though it may emulate, never copies its neighbor, we are not surprised to find the utmost diversity among the high schools as regards conditions of admission, courses of study, and methods and means of teaching. If in all this diversity there were perceptible any unity of principle, the diversity would be far preferable to any kind of uniformity. But this is not the case. The

lack of central authority is everywhere noteworthy. Nor is there any *school committee's manual*, to instruct the minister or the farmer, newly elected to this dignity, in the principles of school organization. Each town high school is to be accounted for only by its own local history. The experience of mankind cannot penetrate to it.

In these schools, moreover, the teaching ranges through all degrees of badness and goodness, the bad, on the whole, according to Mr. Martin, seeming to prevail. This can be accounted for in two or three ways. First, the teachers are overworked. Secondly, the teachers are generally graduates of colleges, where they often learned vicious methods. Thirdly, they are ill provided with the means and accessories of good teaching.

Among the various studies pursued in these schools, Latin is the best taught and undoubtedly furnishes the best discipline. Some 8,000 pupils in the schools are studying it, or more than half of all the high school pupils in the State.

In the report for 1884-85 Mr. Frank A. Hill, principal of the Chelsea High School, discusses *A Course of Studies for High Schools*. This is a genuine treatise, within very narrow limits, on secondary pedagogy. We know of nothing, produced by an American high school teacher, more worthy to represent our secondary education in the general literature of this subject. Compared with the stately work of Schrader in German, these twenty-five pages, begged by Mr. Dickinson, and hidden among other things, seem strangely incongruous with the splendor of everything else in American education. French and German institutions reflect themselves in special literatures with far greater facility and freedom than do corresponding institutions in America. Perhaps this is partly because French and German publishers issue books more cheaply, or insist less strenuously on prospects of abundant financial returns when negotiating for the printing of a volume. Think of the books of Schmeding, Christensen, Frary, Bigot, Vessiot, on the *classical question*. Do these books *pay*? Or is there no similar question in America? The possible writers and publishers of such books think they know to what kind of a public they would have to appeal. Perhaps they are right in not venturing on the enterprise.

Mr. Hill not only offers a simple and manageable course of study for high schools, but suggests also the principles that should govern the teaching of the several studies. These, of course, are briefly given. His little essay seems like an outline of a possible book, awaiting only elaboration and illustration. Even as it is, it is a most useful compend of sound doctrine, never falling into common-place or trying to create a sensation with novelty.

"The main object in studying Greek and Latin," Mr. Hill maintains, "is to read them intelligently and elegantly." The word "elegantly" shows that the author, when he writes "*read*," means *translate*. Hence, the object of studying the classics, in his conception, is elegant translation. Evidently, the freemasonry of modern humanism has no pass-word or grip by which its members recognize each other.

Mr. Hill naively refers, as so many American defenders of the classics have done, to the unanimous report of thirty-six professors of Berlin in behalf of an extended Greek course. This Berlin report

does yeoman's service this side the Atlantic. Within less than a year it was cited as a conclusive settlement of the classical question by Pres. Sprague in his inaugural address at Mills College, California. But one must certainly be uninformed as to the standing of the report in Germany itself, and also as regards the general status of the classical question abroad, to quote the Berlin professors as having given to this question a final answer.

BOOKS.

Primary History of the United States for Intermediate Classes, Illustrated. New York: A. S. Barnes & Co

A book in which paper, type, press-work and illustrations mark the highest perfection yet attained in book-making.

An introduction to the study of Chemistry, by Ira Remsen, Professor of Chemistry in the Johns Hopkins University. New York: Henry Holt & Co. 1886.

This book impresses one at the outset as made on a scientific plan, and holds well to the central idea of keeping clearly in mind the difference between chemical and physical changes. We notice, too, a higher degree of unity in the work than is usual in school chemistries. Many of them are written as if the various topics had been assigned to different writers. The book deals only with inorganic chemistry. The author realizes that the ordinary playing with chemicals, which passes for the study of chemistry in many schools, has already helped to bring scientific study into disrepute as a means of mental training. Only by a genuine scientific method and by thorough teaching can the sciences be made to yield adequate results in mind development. This seems clearly apparent to the author, and he has done his work accordingly.

Some minor points seem to us open to criticism. The discussion of alloys is too meagre, and the treatment of mercuric oxide, on page 339, is rather vague. In experiment 160, no mention is made of the process of developing, and the student is left to infer that he will find the image directly upon the plate. In experiment 17 we should expect some difficulty in heating to redness manganese dioxide in an iron tube closed at one end by a cork.

The book will be found rather advanced for many schools, and we are glad to learn that a more elementary work is in preparation by the same author.

A Geometry for Beginners. By G. A. Hill, A. M. Boston: Ginn & Co.

We once knew a teacher who was wont to carry her classes through Geometry in a strictly oral method. No text-book was used by the pupils. The requisite definitions and other preliminary matter were conveyed to them by the teacher herself by word of mouth and with the aid of the black-board. Then was explained what is meant by a demonstration and by a solution; and finally, when the pupils were duly provided with the necessary conceptions, and would come to the work with a proper understanding of its nature, propositions were given them to prove by their own resources, and problems were assigned for solution in the same manner. This seems to us still the

true way in which to teach geometry. In the ordinary text-book teaching the pupils learn proposition and demonstration in a lump, put their figures on the black-board and reproduce what the book has given them. It may be that their memory is the sole faculty called into action.

Mr. Hill gives us a book in which the former method is carefully followed, and the routine method so guarded against that it cannot be used. Some demonstrations are given as specimens, but more must be originated by the pupil himself. The language of the book is simple and informal. Exercises of every sort are profusely supplied, always leaving the learner something very substantial to do for himself, and rarely going beyond what a good scholar *ought* to do for himself. As compared with the text-books most in use, the book is not easy; but it is solid and satisfying. In our own school it has proved itself practically an excellent working text-book of geometry.

In the great *Luisenschule* for girls in Berlin, whose programme includes three foreign modern languages,—though of course no ancient ones,—geometry is not taught. How Dr. Mätzner justifies to himself this omission we do not understand. Whatever Latin and Greek might do for the girls is abundantly done by the French, English and Italian. But geometry, as taught in Mr. Hill's method,—and such books are not wanting in Germany,—would seem to have no substitute in any other studies of the programme.

Latin course. First year. A. M. Cook, A. M., St. Paul's School, London and New York : Macmillan & Co.

A Complete Latin Course for the First Year, by Albert Harkness, Ph. D. LL D. New York : D. Appleton & Co.

FIRST STEPS IN LATIN : A complete course in Latin for one year by R. F. Leighton, Ph. D. Boston : Ginn & Co.

A progressive Series of inductive Lessons in Latin, by John Tetlow, A. M. Boston : Ginn & Co.

For boys of twelve, with four or five years more of Latin before them, this is an admirable book. The modicum of work which it lays out for a first year is reasonable, and shows that Mr. Cook has himself been a teacher of Latin not in vain. The book does not impute to boys more knowledge than they possess, and makes no extravagant demands on their memories. In Mr. Cook's *first year* pupils will learn the declensions of nouns, adjectives and pronouns, the four regular conjugations and *sum*, except the subjunctive wood, and a vocabulary not too large to be permanently retained. Ver y few rules are given. The new words are presented but few at a time. The paradigms come gradually and easily. But the chief excellence of the book is its abundant exercises in translation. These are simply magnificent in their fulness and variety. They can be talked or written ; and rapidly as the teacher may go on, they are sufficient for all requirements, and nothing will need to be lingered over till it grows stale.

If the little book of Mr. Cook is really adapted for one year's work, the large books of Prof. Harkness and Mr. Leighton are certainly sufficient to occupy the beginner during three or four. Estimates so widely divergent as regards the amount of work which the beginner can accomplish in his first year are startling. We should say that so much as Mr. Cook includes in his book could be thor-

oughly learned by boys in their first year and be so often repeated and reviewed that the boys would carry it over to their subsequent study with ease and certainty: but that no school boy, except here and there a prodigy, could in any manner whatever, in one year, get through the books of either Prof. Harkness or Mr. Leighton.

In the middle of his first year, according to Prof. Harkness, the learner will wrestle with the subjunctive mood. We appreciate Prof. Harkness' *Grammar*, and understand the popularity that it enjoys. But a long experience in teaching boys Latin brings us to conclusions very different from those of the distinguished professor as to what is a good method in the Latin elements. We submit that vocabularies much shorter, composed of words much easier, with proper names much more usual and managable, would better suit the puerile nature, and that syntax should be introduced far more gently and be illustrated in exercises more copious and interesting.

We do not wonder that Mr. Leighton in his preface apologizes for the large size of his book. It is larger than even Prof. Harkness'. It is almost an entire Latin Grammar, with abundant exercises and with innumerable pedagogic devices which make interesting revelations of Mr. Leighton's own method, but perhaps too minutely prescribe a method to any one else. The book is beautifully made, bearing evidence of great painstaking, not too rapidly advancing in vocabulary or syntax, and apparently without sudden and discouraging difficulties. But it does not leave a sense of freedom. A teacher may desire occasionally to take the initiative himself. In that case he will esteem a Latin primer that gives him what he must needs have in print,—that is, words and sentences, paradigms and rules,—but leaves him to teach after his own fashion.

By the omission of paradigms Mr. Tetlow's book is saved from being so large as the two last mentioned. Unlike these, moreover, it is simple and attractive in appearance. For the grammar proper reference is made to Allen & Greenough, Harkness and Gildersleeve. The distinguishing feature of Mr. Tetlow's book is its formal inductive method. First are given, in each lesson, several sentences clearly embodying the principle to be discussed. Then the pupil is taught to *observe* these sentences with especial reference to the matter in hand, and to *infer* the general law to which, in this respect, they conform. Lastly follows the injunction, "Frame a rule." The actual rules as given in the grammars are no otherwise brought into view than as "references for verification." This we heartily commend as good pedagogy. The best modern tendencies are in the direction of repressing and deferring the grammar, and of supplying the learner with the language itself in liberal measure, with infinite repetition and gradual accumulations, and with the spur of interest always applied.

Probably Mr. Tetlow had in view the older sort of Latin beginners. Perhaps in the rather difficult exercises which he offers for translation in both directions he has not quite sufficiently tempered the mind to the shorn lambs who compose our usual classes of beginners.

The book has, emphatically, its *raison d'être*. Every teacher of Latin should note its method and try to teach in its spirit, whether or not he accepts precisely its form.

THE ACADEMY:

A JOURNAL OF SECONDARY EDUCATION,

DEVOTED TO THE INTERESTS OF HIGH SCHOOLS, ACADEMIES AND ACADEMIC
DEPARTMENTS.

GEORGE A. BACON, . . . MANAGING EDITOR.

VOL. I.

JUNE, 1886.

NO. 5.

ENGLISH LITERATURE IN HIGH SCHOOLS.

PRINCIPAL WILLIAM E. MEAD, TROY, N. Y.

The very scanty helps to be found on the teaching of English literature afford a striking proof that pedagogics is a new science. A somewhat protracted search has resulted in finding a few scattered articles in educational journals and reports, and an occasional hint in a volume of educational essays. But the combined thinking of the last ten generations has not produced a single book on the teaching of English that has attained a wide circulation. This seems like a reproach to our educational system. Hap-hazard methods are not tolerated in the trades or in the arts. But the teacher of English literature usually has to teach as he imagines he ought. His individual wits may help him to a fairly good method; but the valuable suggestions that he can find in almost every other department of teaching are strangely lacking in the department of English literature.

Within the last few years the revolt against the worship of a text-book has led to a general conviction that somehow literature is not to be learned from a biographical manual, and that the real aim of the study is to become familiar with the literature itself. As far as it goes this conviction is good. But it is small help to the teacher who is searching for suggestions to use in the daily routine of the class room. It is surely better to fish with a steel hook than with a bent pin. But the Complete Angler that should stop after giving

this sage counsel would hardly reach a second edition. The teacher and the angler alike need experience. No set of rules will make a teacher: no more will vague generalities. Fresh thought is urgently needed in this department of educational work, and this must come from practical teachers. We all believe that by reading long enough and anxiously enough one can form a cultivated taste. No one can tell exactly when it comes. But to have to say to scholars that they must read until they blunder into an education is somewhat humiliating. We ought at least to start them on their way.

The difficulty of doing this to the best advantage is made greater by the fact that hardly any subject is less easy to teach. Geometry can be taught from a text-book. Botany can be taught by combining study of a text-book with analysis of flowers. Continual appeal can be made to objective realities. In literature the reality is largely subjective. One's reading may be narrow, and yet one may teach geometry and botany fairly well. But the teacher of English must be more than a mere handler of books; he must have drunk in their spirit.

To know what the teacher ought to be is worth something; our present task is to decide what we ought to do. I should like to outline a systematic course in literature from the lowest grade of the intermediate school to the highest grade of the high school; but this would lead us too far from our subject. The problem now before us is this: Given a class in the highest grade of the high school, with ages ranging from sixteen to nineteen, how can they in a year find the best method of approaching to the best literature. In our treatment we may naturally divide the subject matter into English history, literary biography, and the study of the literature itself. These topics we may discuss in their order.

I. In one sense, history and biography have nothing to do with literature. A poem may stand alone in its beauty, and be loved by one who knows nothing of the circumstances of its production or the historical tendencies that it illustrates. But the value of history to our understanding of the laws of the development of our literature may be seen by taking a passage almost at random. Suppose we take Tennyson's *Locksley Hall*. It may be appreciated in part by one who is ignorant of the history of the nineteenth century. But the flood of light thrown upon the closing page by a knowledge of the great inventions and the political revolutions of the last hundred years is a sufficient answer to those who say that literature has nothing to do with aught but itself.

The historical work may well precede by a year the study of literature, especially in those cases where but one year can be given to

each. If the class are to study the general history of Europe, they can hardly do better than to make the history of England for the last three hundred years a centre from which to work in every direction. Unless studied in some such way, general history is soon forgotten. A fact learned in its relations with another fact is like a nail fastened in a sure place; and somehow two facts are more easily remembered than one.

What not to teach may be put in a word. Numerous dates, disconnected and merely curious facts, details of battles and of diplomatic quarrels, together with the stories that crowd the pages of some so-called histories, and yet illustrate no real principle, are out of place in any elementary study of history. The choice of topics will be determined by the teacher's conception of what history is. He will have to decide at the outset whether he will regard history as a record of wars, of state intrigues, of political changes, of court scandal, of the growth of commerce, or of the life of the nation as a whole. Suppose he is laying special stress upon political history. The problem he has to solve is twofold: First, what are the really important events of each century; and secondly, what causes in each century were working toward these ends. Every period shows certain tendencies which are working toward a great event, like the English Revolution of 1688, or the Reform Bill of 1832. The ability to seize on leading causes, to select the important and to reject the trivial, is indispensable to one who would have any just conception of the true relations of historical sequences. The forces at work will vary with each period; but some forces are always at work. Geographical position, race characteristics, modes of living, degrees of education, forms of government and religion, all are doing their part to make each age unlike every other. An outline acquaintance with these topics need not exceed the ability of an ordinary class; and they should all be covered in the general study of each period.

Some period should, if possible, be studied more in detail. Every significant fact should be scrutinized that it may be rated at its true value. No fact is too trivial, provided it be typical. The life of the people and their temper working out in their acts, are the two things best worth knowing. From every point of view one should try to catch a glimpse of the inner life of the people. Their occupations, their homes, their modes of life, their food, their dress, their customs, their laws, their religion, their habits of thought—all have to be known and considered before one can pretend to know the forces that shaped events. Such work is, of course, only for the higher classes of the high school. But any class will be interested in

trying to repeople one of the London streets of the time of Elizabeth, or to realize the scenes at Kenilworth in 1575. This glimpse at the social condition of the people can be made vivid by taking a typical day of the period, and letting different members of the class tell all they can find about the farmer, the merchant, the clergyman, the navigator. Scholars studying thus will soon catch the spirit of a past age; for everything has variety and interest. They may never be able to tell just why the life and beauty of the age of Elizabeth faded out of the England of the days of Cromwell; but to appreciate the difference between the two periods is to take the first step towards its explanation. Some stimulus is frequently needed at this point; and for this nothing is better than a well constructed historical novel. Granting freely all objections to historical novels, on the grounds that they distort facts, give an unnatural prominence to minor figures, and are confessedly partisan, one must admit that they do arouse that interest without which the study of history is dull and lifeless. Outlines of great leading events are a necessity; one must know the tendency of a period; but outlines clothed in nothing but their own nakedness, are as unattractive as most other skeletons. Nothing is lost in thoroughness by making a subject picturesque. In fact picturesqueness is the last product of well arranged knowledge.

Of special value is the study of the great thought movements of an age. For an understanding of the so-called outburst of Elizabethan literature, we must study the Reformation and the Revival of Learning. We shall then be able to account, in part, for the classicism which floods the literature of the time of Spenser and Ben Jonson and Milton.

Political history is dreary enough when it is a record of purely personal struggles. But great political and religious movements like the Puritan Revolution involve social upheavals. The outcome is writing of some sort, and part of it is literature. Social life is everywhere respected, perhaps finding its truest image in the Restoration dramatists and the social satirists of the time of the *Spectator* and the *Dunciad*. Everything which profoundly stirs the lives of a people is sure to reveal itself in literature.

With this rapid glance at the historical basis of our study, we must move on to our second topic.

II. Dr. Johnson once confessed that literary biography was to him the most fascinating part of literature. Till recently most teachers have followed in the wake of the great Doctor, and taught books about literature instead of teaching literature itself. As a bright woman once said to me: "When I studied literature the class learned Shaw's

Manual. We never read any literature. We couldn't have told to save our lives what authors were contemporaries. We never imagined that more than one author lived at a time. One came after the other like beads on a string, just as the book gave them." Obviously her work was not at all a study of literature, but it was still of great importance. Literary biography, when properly taught, may be a means of leading a young student to many a book of whose existence he had not dreamed.

At the threshold of our study we are met by several difficulties. In the first place, there is no book thoroughly suited to the use of a class in literature. All the text-books are too large or too small, too simple or too technical, too full of dates and unexplained names. Everything considered, Mr. Stopford Brooke's *Primer* is as good as anything. It has perspective, and treats some topics with admirable fulness. But after one has dropped out Chaucer, Spenser, Shakespeare, Milton, Pope, Wordsworth and a few general topics, there is little to be said for the rest. The book is a model of condensation and sympathetic treatment. But the scores of names on many pages are mere names to a young student, and are hardly worth learning. With suitable omissions, the *Primer* may be taken as a basis for fuller treatment. No book taken by itself is satisfactory. We shall, therefore, have to make one. How? By combining what is best in a dozen or more books of reference, and requiring members of the class to collect material on topics assigned beforehand. This work will be an extension of the method used in the topical study of history.

As I before remarked, a few great writers who represent the characteristics of a literary age, and set the literary fashion for a century, should be the nucleus for the study of a period. Smaller names may be grouped around the greater ones. Men are imitative in their literary style as they are in the style of their coats. As literary history is but a succession of periods, and each period has its little group of imitative writers clustering about the great ones, we can best trace the course of literary history in the lives of those who have made it.

If, for example, we are studying the life of Pope, there are a score of questions which we naturally ask. What was his personal appearance? How was he educated? What were his favorite books? his friends? his personal character? What are his greatest writings? What led him to write them? What, in short, was the environment of the poet?

Of course any attempt to realize the full environment of a writer is unsatisfying. High school work at best, is marked by a certain shal-

lowness. To a teacher full of his subject, the class in literature will be somewhat annoying. Authors whom he has studied for years, and on whom he could talk for a week, he is obliged to pass by with a word. He must be full of his subject to be worth anything to his class. But he needs above all things, a keen sense of proportion, and a wholesome self-restraint. He must hold the class firmly to the topic in hand. He must be prepared to come before his pupils with no book, and to oppose to their crudities the ripeness of matured scholarship.

III. This work in biography and literary history will probably consume about two recitations a week, thus leaving three recitations a week for literature. Nothing can be a substitute for this. In the words of an excellent teacher, "intelligent, careful, enthusiastic reading of the literature itself, in a few of its best specimens,—that's what we want to secure." A high school class can find time for but few specimens, but this may be no misfortune. For, as Coleridge says in his *Biographia Literaria*, "It is noticeable how limited an acquaintance with the masterpieces of art will suffice to form a correct, and even a sensitive taste where none but master-pieces have been seen and heard.

Literature, then, we regard as the end; all else as means. But as we can read only a little, we find a considerable acquaintance with literary history of great value in helping to interpret the real spirit of a piece of literature; and this interpretation is the problem before us. A young teacher, in dealing with a play, or a poem, or an essay, often has a helpless feeling of inability to bring his class to see the beauties that he sees. What shall he do? It is small help to tell him he must get his pupils to like the poem, or the essay. Such advice is much like telling a boy to enjoy a dinner that he does not like. Every direction has been given to instructors except the one that tells "how to do it." On a few general principles most teachers seem to be agreed:—that the pupil should try to see the general drift of the writer's thought; to discover his purpose, and to judge how closely he adheres to it. A few general principles of art are within the grasp of any intelligent high school class. They may learn that with rare exceptions every carefully finished piece of literature has a beginning, a middle, and an end; that in narration and in argument there should be progress. Frequent analyses are valuable for showing the orderly development of the author's thought, and the relation of part to part. This general outline is, of course, to be carefully filled in with details. But the large view is especially valuable. We must generalize, and generalization on an author's style can be made only by combining the study of parts

with the grouping of facts, so as to draw inferences from them. It goes without saying that a high school scholar's comparative view of the style of two writers will need to be closely scanned, or the conclusions will be startling.

After this general view we are prepared to examine a specimen drama, a specimen poem, and a specimen piece of prose. Each suggestion that I shall make has been tested in the class-room.

Taking *Macbeth* as a specimen drama, a class may profitably spend three or four lessons in a rapid reading of the play. Having gained some acquaintance with the story and the various characters, the reader may take a more critical view. The relations of scene to scene is a valuable study. Let the class give reasons to show that each scene of the play must be placed where it is and nowhere else, and that the artistic unity would be broken if any scene were to be dropped out. A similar test applied to comparatively unimportant characters will show how often the chance words of the meanest characters throw light on the central figures, or on the development of the plot. Impromptu debates on numberless questions may be arranged between different members of the class; as, for example, whether there is any motive besides ambition in Macbeth's mind; whether he was a bad man before he saw the Weird Sisters; whether the tone of the play is lowered by the Porter Scene, and so on. Time analyses, requiring a careful collation of all passages hinting at the lapse of time from the beginning to the end of the play, are valuable exercises. The play may be tested by the three unities of time, place, and action. The value of the unities, and Shakespeare's free treatment of them, will give rise to profitable discussion.

A few of the choicest passages may be committed to memory. Two or three lines a day will gradually amount to a surprisingly long passage. A class may be led to appreciate what criticism is worth by reading aloud in recitation notes of criticisms on the play, and verifying or disproving the criticisms by quotations from it. Tested in this way much so-called criticism will be found to rest on a very shadowy basis.

The suggested topics indicate in general the kind of treatment one may give to a play of Shakespeare. The endless questions relating to diction and imagery, and some of the tests of poetic style, I will touch upon a little later.

Having examined a specimen drama, we may now turn to a specimen poem. How shall we approach Milton's *Comus*? Some preliminary study of the historical or biographical setting of a bit of literature is always valuable. In the case of *Comus*, I think the more clearly one can picture the old ivy-grown castle of Ludlow, where

the Masque was first acted, and the quiet loveliness of the village of Horton, where Milton spent those fruitful five years of studious retirement, the more relish will one have for the poem whose calm beauty is but a reflection of the poet's daily life. To search for the drift of the thought of *Comus* is to search for its ethical rather than its artistic meaning. But the poem can hardly be understood without feeling the throb of moral purpose underneath the music of the verse. Not till we set the poem at the proper angle and view it in the true critical spirit, can we hope to see its full beauty. All attempts at criticism, therefore, should lead the young student to a suggestive point of view.

Poetry is confessedly a difficult subject to teach. Unless the pupils have had some preparatory drill, the introductory work ought to proceed very slowly. There is no satisfactory definition of poetry; so that no teacher can make his class measure poetical beauties by rule of thumb. Poetry is to be felt. Passages learned by heart will, as Matthew Arnold says, serve as a touchstone. If the pupil cannot see the beauties that you see, there is no immediate help for it. He will have to grow into an appreciation. My own class have studied mental science all the year, and with them it has been possible to insist upon the distinction between imagination and fancy that Coleridge and Ruskin make so much of.

Other tests may be applied. Versified prose may be easily detected by turning the verses back into prose. If no poetic thought gleams through the prose lines, if imagery is lacking and the diction is poor, the class may safely infer that the composition has no claim to the poetic form. The essence of poetry, says Shelley, is imagination. Now, wherever this element appears, it is almost impossible to turn the poetry by transposition into even tolerable prose. At best the transformation makes a hybrid. But one advantage to a class in attempting to turn ordinary verse into prose is that the vague images and the weak thought which poor verse may decently cover appear in all their nakedness when turned into plain prose. Fairly good poetry is perhaps best tested in this way. The best poetry bears its own golden stamp, and doggerel betrays its trashiness in every line; but respectable dullness is sometimes so invested with the sanctities that we have to change its form before we can see its worthlessness.

After getting a clear understanding of the meaning of a poem the pupil should try to discover what is its *peculiar* excellence; the one thing that gives it individuality, and makes it unlike every other piece of literature. Each succeeding question should, if possible, grow out of the one before it, so as to lead to some definite conclusion. Perhaps it is needless to suggest that few topics should be

introduced into a single recitation. Let an entire period be spent, for example, in discussing the dramatic weakness of *Comus* in comparison with *Macbeth* or the *Merchant of Venice*.

There remain other topics. The study of literature is not a study of philology, or even of language, yet language and thought are so interwoven that some study of diction as such is hardly avoidable. Of course, one chief benefit of the close study of literature is that from it we learn those choice words which have not descended to the level of the street. My own class, at a suggestion from me, voluntarily counted the words in *Comus*, and arranged them in alphabetical lists. The familiarity thus gained with the poem enabled most of the class to locate any unusual word as soon as it was named.

Another exercise that has been found profitable is the attempted substitution of other words for those of *Comus*. The suggested synonyms will almost invariably destroy the beauty of the passage; but the lesson that a work of art is not a work of chance will not soon be forgotten. If practicable, such work as Coleridge did when a boy at Christ's Hospital would be invaluable to every young student. Speaking of his studies under the head-master Bowyer, he says: "At the same time that we were studying the Greek Tragic Poets he made us read Shakespeare and Milton as lessons; and they were the lessons, too, which required most time and trouble to *bring up* so as to escape his censure. I learnt from him that poetry, even that of the loftiest, and, seemingly, that of the wildest odes, had a logic of its own as severe as that of science, and more difficult, because more subtle, more complex, and dependent on more and more fugitive causes. In the truly great poets, he would say there is a reason assignable, not only for every word, but for the position of every word."

Nothing will supply the place of this patient study of literature line by line and word by word. By advancing more rapidly one can grasp general effects, but the exquisite exactness and beauty of the imagery, and the richness of the diction will escape him who does not pause lovingly and reverently to catch the echoes of the golden lyre, whose music thrills through so much of our poetry from Chaucer to Tennyson. The best results, however, cannot be attained by the study of any single poet. Two or three opposing styles should be compared side by side. Shakespeare, Milton and Pope speak of the moon. Which of the three is most poetic in his treatment? A detailed comparison might be made of the attitude toward nature of the poets of the classical school, and those of the romantic school. An actual comparison of a page of *Comus* with a page of *Essay on Man* is worth a dozen pages of criticism. The difference must largely

be felt, but something of it can be expressed in words. One difference appears in the perfect rhythmical freedom and the musical cadences of Milton's verse in contrast with what Prof. Corson calls the hobby-horse movement of Pope. Versification is an art by itself, far more subtle than many people imagine. The niceties of English scansion are not a study for ordinary high school scholars. If they can be brought to read English verse with sympathetic expression, they can safely leave the scientific study of metrical structure for riper years.

The list of our topics could be easily increased, but the thousand questions that arise in the detailed examination of an English poem cannot be given here. The sketchy outline must be filled in by the intelligent teacher.

In our somewhat illogical division of the subject there remains the topic of prose. It is to be presumed that by the study of grammar and rhetoric the class have gained a fair mastery of the mechanics of language. They are now to try to get, as Prof. Sprague suggests, an acquaintance with the higher grammar of thought and of style. The qualities of style are not to be learned from a text-book. The indefinable something called literary finish must be learned by contact with Addison and Swift and Ruskin and Thackeray.

One of the first things for a pupil to learn is that prose is not a mere huddle of words, but an organism. Let him pick to pieces a closely-woven paragraph, and note the orderly presentation of the theme of the paragraph, the connection and inter-dependence of sentences, and the progressive movement of the thought. The tests which Matthew Arnold suggests for a prose style—"regularity, uniformity, precision, balance"—the pupil ought to be made to appreciate. Other things equal, the nearer approach the style makes to the best conversation, the better. Such a style is Emerson's. But, however admirable in this respect, he pays little attention to the orderly development of his thought, and can almost as well be read backwards as forwards.

In our high school study we cannot trace in detail the historical development of English prose. We can select but a few great names. If we begin chronologically we shall do well to read a few of Bacon's *Essays*. It is true that the *Essays* are mere jottings, but they contain the matured thoughts of one of the keenest observers the world has known. Their wonderful compression mars, perhaps, here and there the artistic form, but each essay is a unit, and can be taken as a treatise. The incomparable brevity of these little *Essays*, in which every word is chosen with art, may be best appreciated by trying to omit a word, or to re-write the thought without increasing the

number of words. The task is well-nigh impossible. Bacon, it is needless to say, belongs to a period before prose style had become fixed. Side by side with passages clear and musical, we find, therefore, sentences that are dark and crabbed. But the sobriety and richness of his style, and the weighty thoughts in every line make him a most suggestive writer to put into the hands of a bright class.

"Not many but much" should be the motto of the teacher. The three or four prose writers whom the class can study should be carefully chosen with the design of correcting certain false notions of style. One of these notions is that good writing consists in piling phrase on phrase, and epithet on epithet. A few pages of Bacon and of Swift will do more to make a young writer use words with sense and precision than weeks of protest. Composition is a study by itself, but it stands in very close relation to the study of literature.

Selections from *Gulliver's Travels* are interesting to every class; and as models of strong, homely English, full of nerve and sinew, without one word of cant or bombast, they have no superiors.

Much too can be said for Addison's papers in the *Spectator*. The style is simple, easy, and graceful, the thought is not too deep, and it is presented in an orderly way. Addison is a model of literary good manners, bowing his way into his subject and bowing his way out again with perfect self-possession. He has the art of ending at the end without being abrupt.

After the pupil has caught the spirit of Swift and Addison, and learned from them the calm and lucid presentation of truth, he may study some more ornate prose. The organ-roll of our richest English prose ought not to be wholly unknown to him. Passing by Milton, who can hardly be called a true *prose* writer, and Burke, the tone of whose thinking is somewhat above the high school level, one may find enough illustrative passages in De Quincey and Ruskin. A few of these may be selected with sparing hand, but both Ruskin and De Quincey have too many questionable mannerisms to be indiscriminately put into the hands of a young class.

Of modern writers the one most likely to afford valuable suggestions is Thackeray. His style is strongly marked. It is picturesque, specific, flexible. Occasionally it is careless, but I know of no style that lends itself more easily to conversational chat and to lofty treatment of great themes. Some of his best work is to be found in the *Lectures on the Humorists*, but the stamp of a master is upon every page he wrote.

What to do with the selections from Thackeray and the other writers I have suggested has been in part indicated. Close comparative study of prose authors involves work similar in many respects

to that done in poetry. One may contrast the rhythm of prose with the rhythm of poetry and note how dependent the rhythm of each is upon the tone of the thought. Flippant antitheses are not richly musical, and solemn, majestic thoughts are not expressed in light and tinkling phrases.

The importance of thought as the foundation of style can not be too strongly insisted upon. Form of expression is a minor matter in comparison. But the immense advantage that a brilliant style gives one whose thought is only fairly good may be easily shown by selecting commonplaces which have been so gorgeously dressed as to outshine plain thoughts of far more solid worth. A clear, plain style is within the reach of any decently educated person. Brilliancy is in part a natural gift and in part a result of deliberate study. To discover the devices of a skillful prose writer that appear in the beginning and ending of paragraphs and of sentences, in the variation of phrase and in skillful repetition, in the interjection of short sentences between long ones, in the addition of apparently unimportant words that bind together sentences, in the balancing of sentence against sentence and paragraph against paragraph, in the alternation of question and positive statement—these and a hundred similar matters may profitably be our aim in the study of prose.

With this brief sketch I must leave the subject. I have not attempted to outline a high school course in literature. That would require an article by itself. My aim has been rather to indicate a few general principles upon which the study should proceed, and some of the methods one may adopt in the class-room. But we must not forget that the teacher is more important than the method. Whatever the faults of his method, he who can inspire his class with the notion that they are studying not merely a book, but a subject, and can induce them to read with intelligent interest the best English, has solved the problem with which we started. All else may be left to the future.

Our investigations in several hundred schools, in every state in the Union, give the following result as to the methods of Latin pronunciation in use. Of the institutions 6 per cent use the Continental system, 46½ per cent the Roman, and 47½ per cent the English. Some of these schools however, are very large, others quite small, so that a comparison of the number of students trained in each method seems preferable. Such comparison shows 2 per cent using the Continental, 46½ the English, and 51½ the Roman.

SOME RECENT FRENCH AND GERMAN BOOKS ON QUESTIONS OF SECONDARY EDUCATION.*

The most striking fact in French and German secondary education at the present moment is the growing discontent, among French and German thinkers, with the existing traditional institutions and methods. The *gymnasium* and the *lycée* are coming under a criticism so general and so searching that it would seem to an American observer of the movement impossible that great changes in the purposes of these schools should not ultimately be realized. What the critics invariably aim to accomplish is the dislodgment of the dead languages from their position of supremacy as the great *sine qua non* of a liberal education.

The publication of the two *Gutachten* of the Berlin professors (republished in this country by Ginn & Co.), which seemed to many adequate to give a quietus to all discussion of the subject, served only to provoke fresh onslaughts upon the classics. It was a Berlin professor, and that too in the philosophical faculty, Dr. Friedrich Paulsen, whose book, *Geschichte des gelehrten Unterrichts auf den deutschen Schulen und Universitäten*, published toward the end of 1884, first showed the real significance of the movement against the classics, established it in the eyes of thoughtful Germans on a philosophical basis, and undertook, without heat and prejudice, to infer the direction of future tendencies in higher education from a careful study of its vicissitudes in the past. No book in this field of investigation will easily surpass Paulsen's. All subsequent writers on related themes must make their account with it and will not be allowed to reach very different conclusions unless as the result of a process of reasoning of at least approximately similar range and thoroughness. Paulsen may be regarded as the leader of the modern rebellion against the tyranny of the classics. But he has a host of followers.

Prof. Dr. F. Schmeding's *Die Klassische Bildung in der Gegenwart* is a valiant defense of the cause of the real schools as against the gymnasia, and, as is natural to a champion, is marked by a controversial warmth that makes it very interesting. Schmeding hits hard, and uncovers the pretensions of the humanists with remorseless zeal. He sums up specifically his charges against the classics and substan-

*Any of the books mentioned in this article may be more fully noticed hereafter.

tiates them at length. Not the least interesting thing in his book is his collection of humanistic ejaculations and renderings of thanks on the part of gymnasial graduates that they are not as other men are. The consciousness of initiation in a mystery, of possessing a key, a secret, a special light or blessing that sets them apart, the consciousness of desert betrayed by admiration of a college degree, has led many a classicist into excesses of self-conceit, and these Schmeding takes a savage pleasure in collecting and repeating as a weapon on his own side of the contest.

Jens L. Christensen's *Der moderne Bildungsschwindel* need be noted only as one of the straws that show how the wind blows. It is an immoderate satire, such as might relieve the mind of any nervous sufferer who can no longer endure the perpetual din of "educators" about *culture*.

"*Asmodi Redivivus*," *Der Krebs Schaden unsrer Gymnasien*, puts very clearly and impressively the case of the gymnasia as having ceased to fulfil a useful function in modern society. The critic who uses this pseudonym states the intention and aim of the gymnasia, then in detail shows how far they are at present from fulfilling this intention, and goes on to offer his remedies. These remedies consist in cutting off Latin and Greek from the first three of the nine years of the gymnasial course and in giving the time thus gained largely to French and English. Thus he does not break with the classical tradition altogether. The current grammatical method of teaching Latin and Greek he reprobates with vigor. The book is small and cheap, easily procurable and easily read, and is much needed to correct the rose-colored view of the German gymnasia disseminated in America by the teutomaniacs who have studied abroad. Did not a very great number of witnesses, in the press and elsewhere, confirm to us Asmodi's diagnosis, we should have thought it necessary to make great deductions from his descriptions of the feeble achievements of the schools in question.

L. Graf von Pfeil, *Wie lernt man eine Sprache am leichtesten und besten?* champions the natural method, so well-known in this country from the labors of Heness and Sauveur, and the writings of Marcel. Of course he earnestly opposes gymnasial methods. Some of his theses are: "Fluency in the native tongue must precede study of a foreign one. Fluency must be attained in one foreign language before beginning a second. Grammar must not precede, but follow, the learning of a language."

Clemens Nohl, *Pädagogik für höhere Lehranstalten. Erster Theil, Die Lehranstalten*. Prof. Nohl is director of a girls' school at Neu-wied. With true German patience and thoroughness he contributes

his mite to the cause of reform in the shape of what promises to be, when completed, a book of near 800 pages. We are inclined to rank his book next to Paulsen's in respect to dignity and temperateness of treatment and cogency of argument. But while Paulsen contemplates the total abandonment of Greek from gymnasial programmes, and the reduction of Latin to a minimum of necessary knowledge, Nohl counts upon retaining both the classic languages, while, however, relegating them wholly to the last six gymnasial years, and diminishing the time given them even there, and purposes to make French the fundamental language, that shall begin early and go with the pupil to the end of his course, and to add English also early enough to give it six years in all. Nohl is profoundly conscious of the incisiveness of his reformatory surgery, and discusses all his innovations from the point of view of scientific pedagogy and psychology, leaving no weak spot, and accumulating conviction in the mind of his reader. His is a book that should find a place in the working library of every member of that growing class of American teachers that read German with ease.

Besides the books above named, the *Zeitung für das höhere Unterrichtswesen*, a weekly published at Leipzig, by Dr. H. A. Weiske, regularly informs its readers of the progress of the anti-classical revolt, and is always interesting, often peculiarly pungent, with regard to questions interesting on this side of the ocean.

Crossing the boundary westward, we find the educational world of France profoundly stirred by the iconoclastic work of Raoul Frary, *La Question du latin*. Frary, like all his German compeers, the critics and reformers above named, is a classically educated man. Since he urges the complete exclusion of the ancient languages from the *lycées* and the *collèges* of his country, his protesting countrymen do not hesitate to charge him with apostasy, so ingrained is the feeling in the humanists that their culture is a religion, and that its professors constitute a priesthood. Frary is now a journalist but was once professor in the *Ecole Normale*. By his piquant, epigrammatic style he easily makes his book readable and enjoyable, so that it is a pleasure to read it even if one must dissent from his radical conclusions. Frary argues from the needs of the public welfare, and from the fact that the study of Latin and Greek absorbs energies that should be directed into channels more directly leading to serviceableness in civil life, where it is needed to train young Frenchmen to patriotism and in the arts wherein they must compete with formidable neighbors. The standard sneer of the classicists that any abridgment of the time given to the ancient languages is sure to open the gates to a flood of "Americanism" and material-

ism, falls with considerable pertinency upon Frary, who openly argues the cause of the material welfare of France as one essential condition of her progress in all the elements of national prosperity. And this reproach Frary's critics are not slow to make.

This constitutes the staple of the argument of the unimportant book of A. Vessiot, *La Question du latin de M. Frary*, who writes in the tone of insulted majesty, so well known among defenders of the sacred cause.

But far better, as good, indeed, as M. Frary's own book, is the work whose publication it inspired,—Charles Bigot, *Questions d'Enseignement Secondaire*. M. Bigot sees that it is not right to treat Frary with mere contempt, but tries in a most excellent spirit of appreciation and partial approval, to break the force of his extreme arguments, and to reconstruct on another plan the classical house which he has demolished. Bigot allows the *lycées* and *collèges* to give up their Latin and Greek as a load they can no longer carry with modern studies so clamorously urging their rights, but pleads for the establishment of a few schools with longer courses of study, where may be trained, by more fruitful methods, in the good old languages of antiquity, an *élite* of youth destined to form *la classe dirigeante*.

M. Frary, like Bismarck in Germany, sees danger in the over-production of learned young men, unfitted by their education for any career except as salaried officials in church or state, men *déclassés*, tending to destructive socialism, disqualified by their school training for producing any article of human use or ornament, and sure to become a nuisance as office-seekers if not worse.

The causes of the profound discontent with classical education in Germany and France fortunately are almost non-existent in America. We have never begun to make such immense sacrifices of the time and energy of our youth to the classical idol as has come to be the custom in Europe. We have no privileged social class admission to which is conferred by a classical education. Perhaps it is even a blessing that our office-seekers are not eminently men of classical training. Rarely does a teacher see or hear of a young man whose pride in his degree of A. B. prevents him from doing anything whatever whereby money will be earned. Men of education who are utterly unclassed and can find no place in which to work are almost unknown. Yet the classical question exists here also, and these contemporary wrestlings with it among European educators have for us something more than the interest of a spectacle in which we have no personal concern.

SOME LESSONS OF A RECENT ELECTION.

In the February *ACADEMY* we announced that Auburn was to have a new high school building. The announcement seemed afterwards a little premature, as the enemies of the high school by political influence in the legislature were able to throw serious obstacles in the way. It was finally decided to leave the whole matter to a popular vote, the question being not only on the re-election of the Board of Education, who favored the school, but also on the bonding of the city for the amount necessary to build. The opponents of the school were jubilant, boasting that they would bury the whole project under an overwhelming majority, and the friends of the bill felt anxious, knowing the powerful influences that were arrayed against it. The result of the election, which was held May 18th, was a surprise all round. Not only were the old members of the board elected by overwhelming majorities, but it was decided to bond the city for the cost of the new building by a vote of more than two to one.

This was not simply a question of a new or an old building. The growth of the school has been such as to necessitate one of three courses, either to cripple the school, or to abandon it entirely, or to increase its resources and efficiency at a large cost. The enemies of the school of course desired the second alternative, but the first seemed to offer a ready means to this end, and so they gave it hearty support.

This result contains a lesson which may with profit be studied by both friends and enemies of the modern high school. We call attention to two points. Auburn is a representative city, having a high school thirty-one years old, efficient, popular and rapidly increasing in size. For various local causes Auburn is essentially conservative, more so than the average city. It is also above the average city in culture and general intelligence. It supports three daily newspapers, one of which was bitterly hostile to the measure just carried. The matter of a new building with all its related issues, the question of bonding, the value of the high school, the propriety of higher education at public expense, were constantly before the people and fully discussed for months, and when the final decision came two voters were favorable for every one opposed.

Our second point relates to the part taken in the contest by former pupils of the school. The writer was in Auburn the Friday before the election and had the good fortune to be present at a

committee meeting of the high school alumni. The brief, pointed, practical speeches, the definite plans and suggestions, the clear judgment and ready tact displayed, were a convincing proof that the scholar has indeed a place in politics. The teacher's lesson in this is easily seen. Unless our work can be such as to command the loyal help of our old pupils in every time of need, it is vain to make many pretensions or claim from the public on mere theories or on abstract grounds the support of the high school. The spirit, the work and the success of the Auburn high school alumni should be a source of encouragement to every earnest teacher, as well as a strong stimulus to make his work thorough and lasting, such as to command for the school and the system hearty support and help when the individual teacher shall have finished his labors and become only a memory. To do this it is necessary that we stand before our scholars, not simply as ambitious and able men eager to get on in the world, not even as earnest students and quick thinkers merely, but also as devoted men of perfect honesty and full symmetry of character, ready and anxious to give the best work of our best years to the school.

It is no part of the purpose of *THE ACADEMY* to write articles for general reading. It will therefore only indicate what lesson for the general public and the opponents of secondary education by general taxation, this election might easily be thought to teach. Certain parties tried in Auburn, as they try everywhere, to create a belief that the high school has no place either in a proper system of popular education or in the affections or regard of the great mass of the people, but that it is maintained by the many for the benefit of the few to the great injury of the taxpayers. The recent election throws a flood of light on this phase of the subject. From various local causes there is in Auburn a prejudice against bonding which can be found to the same extent in few other places. The opponents of the high school had rung every conceivable change on this hated theme, and the evils of bonding had been presented in every possible light. On this question there could be no concealment or misrepresentation, for it was conceded from the outset that the whole cost of a new building must be defrayed by bonding. Only taxpayers were allowed to vote, and an efficient committee stood at every poll and freely exercised the privilege of challenge. The taxpayers of Auburn settled the question in favor of a new high school by a vote of 1,306 to 614.

THE CLASSICS AND SECONDARY SCHOOLS.

Early in February the editor of *THE ACADEMY* set himself to collect statistics regarding the study of Greek. For that purpose a circular with stamped envelope for reply was mailed to the Professor of Greek in every college in the United States, and information was asked as to the study of Greek, past and present. At about the same time, similar circulars with like enclosure were mailed to some 800 schools and school officers in every State of the Union. Of course the larger, older and more important schools were mainly addressed, and to the best of our knowledge, no prominent school was overlooked. Three or four hundred replied promptly. Answers from the others have straggled along until, at the present writing, a majority have been heard from.

Various causes prevent this method of inquiry from securing all desired results. Many teachers have no interest in this or any other matter that does not concern their direct pecuniary income. Many are over-worked to a degree that renders every moment of leisure valuable for rest. Some habitually procrastinate. Doubtless some are ashamed to indicate how small is the liking in their schools for higher studies, and choose silence rather than expose the real state of affairs. Notwithstanding all these drawbacks, we feel that the results gathered from over 600 institutions with more than 100,000 students may be considered fairly representative.

In this investigation it has been found that the impressions of teachers regarding the decadence or growth of Greek study are little more than expressions of their own feelings, often of their own wishes. In combining the results, therefore, no account has been made of expressions of opinion. We have considered simply the facts.

An attempt was made at the outset to adduce corroborative evidence from the number of Greek books sold as compared with former periods. The rise of new firms, the retirement of old ones, the natural changes in the drift of business and the natural unwillingness on the part of some firms to make known their sales, render it impossible to base exact knowledge on such an investigation. There is little doubt, however, that the sale of Greek books has increased during thirty years one hundred per cent faster than has the population. This may in part be offset by the fact that successive members of the same family are less likely to use the same book than a generation ago. But even with this allowance the sale of books is conclusive, if not exact, evidence of the increased study of Greek.

In presenting the statements that follow, we do not forget the change that has taken place throughout the country within a generation, the growth of the high schools into prominence and the decay of some academies. There is, however, a tendency to exaggerate the latter. Extensive inquiry and careful comparison justify us in saying that there are more pupils in private schools and academies to-day than ever before. One easily thinks of old institutions that had abundant prosperity years ago, and, as the growth of high schools has been phenomenal, the impression largely prevails that the high schools have crowded them out. Facts do not justify the impression. Here in New York we notice Fairfield and Whites-town are not filled as formerly with students, but we do not remember that the same generation that saw their decline has seen the growth of Cook Academy and Colgate and Fort Plain, besides scores of excellent private schools and business colleges. Three times as many pupils are paying tuition to-day in this state as thirty years ago, and the average rate of tuition has increased largely during the same period. Albany furnishes a case directly in point; a highly-organized and successful high school of 600 pupils has grown up within twenty years, while an old academy still flourishes by its side, and other secondary schools have grown during this same period. In Syracuse, the high school established thirty-one years ago, has nearly 600 pupils, and other secondary schools in the city have grown to success and prominence, while more youth are sent from the city to-day to be instructed elsewhere than before the high school was opened. In the eastern states not only have the academies like Andover, Exeter and Wilbraham increased in numbers, but other similar schools have come into existence. It can fairly be said that the gains in the high schools are absolute gains, not so much subtracted from the other schools.

Our circular asked for information on the following points:

1. The number of pupils studying Greek.
2. The number ten years ago.
3. The number twenty years ago.
4. Do you encourage the study of Greek?
5. The number of pupils in Latin.
6. The number ten years ago.
7. The number twenty years ago.
8. The number of advanced pupils in school.

The increase in Greek students reported for the decade from 1865 to 1875 is forty-two per cent; for the decade 1875 to 1885, it is seventy-two per cent; that is, where there were 100 studying Greek in 1865, there are 142 in 1875, and 244 in 1885.

Seventy per cent of the teachers encourage the study of Greek, ten per cent exercise no influence, while twenty per cent discourage it. It is proper to add that these last are almost exclusively in the smaller schools, only three being in schools having ten pupils in Greek.

Some of the western high schools have made no provision for Greek, and others have discarded it. Thus the West Division High School of Chicago reports 692 pupils in Latin, but no Greek, that having been dropped two years ago. Before that time the Greek department was well sustained.

The increase in Latin is still greater, reaching 132 per cent in the first decade, and 130 per cent in the second, that is, where there were 100 pupils taking Latin in 1865 there were 232 in 1875, and 533 in 1885.

The increase in attendance in these secondary schools during the same period we cannot give, as, owing to a lack of clearness in the wording of our question, many answers were incomplete.

The circular to the colleges asked for information on thirteen different points and carried the inquiries back fifty years. The scope of the answers varies so widely, and the details presented are so full, that no adequate statement of them can be made here. So far, however, as they bear directly on the Greek question, they indicate a growth in Greek study greater than could be explained by referring merely to the growth of the country. In the matter of Latin they show no advance at all commensurate with the extraordinary increase of that study in the secondary schools. The explanation lies of course in the fact that Latin is not considered to any large extent as a college preparatory study, but is pursued by most for its own sake as a preparation for life work.

This may furnish a proper theme for thought to those who believe that it is the undue fostering of the classical course at college, and that alone that keeps Latin in the schools. Four-fifths of the students of Latin in the secondary schools not only fail to go to college but they take up the study without any expectation of going.

In conclusion we would say that this work was undertaken with the purpose simply of making the results known, not of supporting any position. Each reader will draw his own inferences. We knowingly omitted no prominent school in our letters of inquiry, and we have garbled or suppressed no fact in giving the result. It may surprise others as it has surprised us to notice the enormous increase in secondary schools, the sudden up-springing of so many schools larger than any known to educators twenty years ago. It will doubt

less seem to some that we must exaggerate. For those we can only add that we have simply arranged and combined the figures sent to us by the official representatives of the schools addressed.

TENURE OF OFFICE AMONG TEACHERS.

A Massachusetts law requires that the public school teachers of the Commonwealth be elected annually. No school committee may contract for the services of a teacher for a period longer than one year. The evils of this system are, that it produces in the teacher an unrest which seriously impairs his efficiency ; that it leads to the retention and selection of incompetent teachers ; that it destroys the teacher's independence ; that it gives the committeeman an opportunity to vent his spite upon a teacher for an imaginary offense ; that it drives out of the profession of teaching and keeps from entering it, superior men ; and that, therefore, the system of annual elections is a damage to the public schools. To eradicate these evils a bill has been reported to the legislature by the Committee on Education, providing that "the school committee of any city or town may elect any duly qualified person to serve as a teacher in the public schools of such city or town during the pleasure of such committee, provided such person has served as a teacher in such city or town for a period of not less than one year."

This system of permanent tenure during efficiency and good behavior already prevails in the city of New York, and in many other places, and even in Massachusetts in the case of teachers of the State Normal schools. Those who are acquainted with the effects of such permanent tenure agree that "the protection thus guaranteed works advantageously for all concerned ; for the law, securing stable tenure of office for the teacher, secures for the pupil instruction of a far superior character to what would be given him, if doubt about continuance in position and consequent unrest troubled the teacher's mind." The quotation is from the report of the city superintendent of New York. *

There is, however, another side to this question. All persons concerned in school management know that the displacement of incompetent teachers furnishes one of the chiefest annoyances in our school system. There is absolutely no public sentiment on the subject. In a majority of cases it is simply impossible to oust a man or woman of good moral character and passable attainments,

who fails in all other requirements of a good teacher. We have known a petition signed by a score of wealthy, influential citizens, asking that a woman be retained as a primary teacher, because she was old, broken down by bodily infirmities, with defective sight and hearing, and could find nothing else to do!

There is little recognition by the public of the fact that the schools are to educate children, and not to find places for teachers. Witness the periodical cry that "married women should not be employed as teachers; their husbands should support them and give the single women a chance," or the mysterious provision of one city that no two teachers with the same name should be employed. Witness the growth of the feeling that "our graduates should be provided for first," that each ward must have its proper representation in the city teachers, that certain persons "must be taken care of." This must alter. The schools must be maintained solely for the advantage of the pupils, and teachers should be employed solely on account of their fitness for the work. All other considerations are a wrong to all concerned. Only a proper public sentiment, however, can bring this about, and in fostering such sentiment, right-minded teachers can render sterling service. A real professional spirit among teachers, a recognition of well-established standards of excellence, a hearty condemnation of all self-seeking, and examinations for teachers' licenses instituted and conducted by teachers, as in all real professions, will tend to make a profession of teaching and create a change in the views with which the public looks upon teachers. Till this change comes, all legislation on the tenure of office will be harmful. It will simply make it more difficult to get rid of the bad teachers. It will not help the successful.

INTERCHANGE.

The object of this department is expressed in its name. THE ACADEMY, as the official organ of the "Associated Principals of the State of New York," aims through *Interchange* to meet the everyday wants of the secondary schools in the presentation of the methods of instruction, discipline, and general management that have been in use in the best high schools and academies, not only in New York, but in the wider range of its constituency, which now represents live teachers in nearly all states of the Union.

To a certain extent, all teachers meet with like difficulties, struggle against like obstacles, meet with varying degrees of success and failure in their methods, and what affects one affects all.

Teaching will rise to a profession when competent teachers work loyally together and place their work upon a professional basis, when they are honest, unselfish, and helpful to each other.

Secondary teachers are invited through *Interchange* to tell their fellow-workers what successful methods they have adopted in any phase of inside school work. The live teacher who is doing the best and yet always looking for a better way, may here, by inquiry, find out what other teachers are doing in the same phase of school work. It will be the aim of the department to deal largely in facts, or brief statements of methods employed, and in order to give a definite value to each, it will present signed articles. The topic selected for the June number is, at least, timely. Ten principals were asked, "How do you conduct graduation exercises?" Their replies—alphabetically arranged—are given below, and the statement of the Auburn plan was subsequently added by special request. Further communications concerning any special features of graduation-day exercises will be welcomed. The symposium in the September number will be in answer to the query, "How do you conduct rhetorical exercises?" State details as to frequency, kind of exercises, and apparent benefits. Communications upon this or any other practical inside-school topic for *Interchange* should be addressed to Principal G. R. Cutting, Auburn, N. Y.

GRADUATION DAY HONORS IN THE SCHOOLS.

ALBANY HIGH SCHOOL.

We have three parallel courses of study,—English, Classical and Latin-English,—and three "Honors," which bear the same names on our commencement program, and are assigned to the three students who stand highest in scholarship in each of these courses of study. The one of these three who ranks highest for the course pronounces the valedictory. We have a Latin salutatory which is assigned to some *Latin* student of high rank. The other commencement appointments are determined partly by scholarship and partly by excellence in rhetorical exercises. We have about five orations and five select readings or essays.

JOHN E. BRADLEY.

AUBURN ACADEMIC HIGH SCHOOL.

The system of awards of honors in the Auburn Academic High School aims to be so flexible that it may adapt itself to the peculiar conditions in each class. Classes differ as well as individuals. Any inflexible system was found to work injustice.

The aggregate of marks from which any award shall be made, comes from the average of the markings of all the teachers in the school, each teacher contributing marks in his or her own department of study. These marks must be an average of class work, recorded monthly, with examinations held at completion of subjects, each

counting one-half, especial emphasis being laid on class work. The record of the above is always open to inspection at the principal's desk, having been recorded in the hand-writing of each teacher, as a part of the permanent records of the school. It is not desirable that pupils should feel that they are studying merely for marks, hence no public or private announcements of rank are ever made to pupils until the study is completed, unless a pupil falls below the satisfactory per cent when he is given a warning.

The valedictory is assigned to the highest in general scholarship.

The salutatory is assigned to the second in general average. (Where practicable, one of these leading honors is given to a pupil in the English course, and one to a pupil in the Classical course. This has been practicable for the two years past.)

The other honors are *named* from the department of work in which the pupil excels, *e. g.*, a pupil whose standing has been highest in all the mathematical studies of the course (Arithmetic, Algebra and Geometry) is credited with the "Mathematical Honor." The honor is awarded for general excellence but *named* from a special excellence. Thus a pupil must stand high in all studies to receive an honor; and is credited with a special proficiency that nearly all good scholars show in some one department (not one study) of work. Should a pupil of good general scholarship not excel in any special department the honor is named "General Scholarship Honor."

If any pupil after the above "first-grade awards" have been made, is found to have excelled all other members of the class in one department of study, he is awarded a "supplementary honor" in that department. The object of this condition is to encourage those who are exceptionally proficient in one department who could not receive any recognition in the "General Scholarship" award. For instance, three pupils in recent classes were given "Elocution Honors" as supplementary to the general award. Each far excelled by marks and common consent all members of the respective classes in elocution, yet neither excelled in general scholarship. We believe that there should always be some recognition of such exceptional merit.

The "honor limit" is understood to be about 85 per cent. The teachers may at their discretion raise or lower this. It was 85 per cent in class of '85 with concurrence of class. The general aim is to have about twelve speakers (with essay limited to 600 words) appear. Our recent classes have averaged about thirty in number.

All members of the class prepare graduation orations or essays which are kept on file in the school records as the class-book. In this book all candidates for graduation appear alphabetically with no reference to honors. The High School committee of 1884 and 1885 have complimented the classes of '84 and '85 by publishing their class-books. Both classes have thus appeared entire before the community and their friends; both books have been an honor to the individual pupils and the respective classes; and have been worthy of the especial compliment thus paid by our board of education.

The above system has been adopted after a trial of various systems, and claims to be a fair system of recognition of general and special merit, and it works practically, giving satisfaction as far as any system can, to classes themselves; for all applications of it are explained publicly to each class, with books, figures and reasons; everything is open to investigation by everybody; and there is always a disposition among teachers to modify it in any subsequent year, if we find it in its applications to have worked injustice to any member of any class. I have never known any one to criticise it adversely who has first investigated the details of award.

If I were asked what I consider the next best plan, I should say the system which includes no speakers whatever from the class, the board securing some eminent gentleman to deliver before the class what should be known as "The Annual Commencement Address."

GEORGE R. CUTTING.

BINGHAMTON HIGH SCHOOL.

The Board of Education has made the following regulations concerning commencement appointments:—

SECTION 1. The appointments for commencement in the twelfth grade (graduating class) shall be:—a valedictory oration; a salutatory oration; a first, second and third oration—which appointments shall rank in the order named, and shall be competed for in the following manner by the ten students having the highest class-standing, who have passed Regents' examinations.

§ 2. Each student desiring to compete, shall prepare, under the direction of the principal of the high school, a written oration or essay, which shall be submitted to a committee of not to exceed five persons, to be selected by the Committee on Schools; each oration or essay shall be accompanied by a sealed envelope, containing its title and the author's name. Such committee shall determine, and return to the Board, the best five such orations or essays, the relative order of merit and the authors' names. The Board shall then assign said appointments, the valedictory to the student adjudged to have written the best oration or essay; the salutatory to the student adjudged to have written the next best oration or essay, and the first, second and third orations, to the three remaining competitors, in the order of merit of their several productions.

§ 3. The number taking part in the graduating exercises, in addition to those receiving appointments, shall be determined by the Board.

The plan has worked with as little friction as one could desire. We require the orations and essays, *as delivered*, to be short, perhaps 650 or 700 words, maximum limit. The honor essays may be 1500 words long as handed in for competition, but are cut down for delivery. We have a prize contest in declamation, open to tenth and eleventh grades. A prize in essay-writing is also offered in the eleventh grade. No prizes are awarded at graduation.

E. R. PAYSON.

BUFFALO HIGH SCHOOL.

No doubt the simplest method of solving the commencement problem is to appoint the required number of participants, according to rank in scholarship. It saves a teacher's nerves, it removes the necessity of carefully weighing rival claims. But it must sometimes fail to place on the program the ones who ought to be there.

The best scholar may be a common-place writer or speaker; the boy or girl with an ordinary standing in classes may have the general information, the incipient knowledge of human nature, or the sparkle and humor to give interest and vivacity to closing exercises.

This is the high-handed method pursued in the Buffalo High School. During the last term of the course, the candidates for graduation are excused from the composition work required of all other members of the school, and are expected to do their best in the way of a graduating production. They are supposed to read and inform themselves in the direction of their chosen subject, and finally to show whatever talent they have, in an essay.

Then we have five or six of them a day read their productions before the teachers. All the teachers are notified, and such as are present have a voice in the choice of speakers or readers. After a group of candidates have thus appeared, the teachers present discuss them regarding style, originality, etc., but the one point most considered, is the general appearance the person will make before an audience, in other words, his or her power to interest the public. By the time the graduates have all passed before the teachers, the latter have a tolerably clear idea of what is what. As to some, they are sure they ought to "go on;" as to others, they feel sure they should not. If the teachers feel in doubt about the last two or three to be selected, half a dozen are heard again and then the required number elected by vote. This method entails work on the teachers, but has been found satisfactory. Candidates are often disappointed, but I never heard the honesty or impartiality of the teachers called in question.

I ought to add that the almost invariable result of this course has been that poor scholars fail to "get on;" the high rank pupils take part, but there are necessarily many good scholars who cannot participate. Moreover the exercises are successful and have been considered for many years an important event in Buffalo.

What I have noted about the scholarship of those chosen in this way shows that there is "a kind of wild justice" in deciding the matter by scholarship. But among a dozen pupils of fairly good scholarship, not the highest or the lowest, I would prefer to appeal to the ability of each to say something worthy of himself and of the school he represents.

As special features we have an original class poem, if we can get a good one; sometimes a class song. The gold medals for the highest scholarship during the Senior year are presented and the usual closing exercises follow.

HENRY P. EMERSON.

COLGATE ACADEMY, HAMILTON, N. Y.

We now allow every one who graduates to appear with an oration 500 or 600 words in length. This, with other necessary parts, makes a long (too long) program. Our relation to the college here leads us to this plan. In former years we had a plan, which I think was better, so far as the pleasure of the occasion is concerned. At the opening of the senior year, I announced to the class that, at graduation, 12 would appear with orations. Six of these would be those who ranked highest in their studies, independent of ability in writing or speaking. The other six would be the six who presented the best orations of all who were left after taking out the first six already named. I also reserved the right to add another to the scheme for any special merit. This plan worked well. We have three prizes always presented to the three best scholars on commencement day. We also have four other prizes given to members of other classes on that day. We have an address to the class by the principal, or some one whom he invites.

JAMES W. FORD.

COOPERSTOWN UNION SCHOOL AND ACADEMY.

Our graduating exercises are a part of a rather composite affair—our annual school exhibition. The first part of our program consists of three original prize orations and three original prize essays, both matter and delivery being considered in the award. The second part, by the intermediate and primary departments, is of a varied character. The third part includes the formal presentation of diplomas and the announcement of prizes. The exhibition occurs in the evening and has an admission fee of twenty-five cents, the proceeds being for the library or apparatus; and it is two and one-half hours long or less. Appointments of orations and essays are made in the discretion of the teachers, to be settled by competition when more than the desired number aspire to the honors. Our prizes are rather conspicuous, amounting in cash annually to over \$100. They are: Punctuality prizes, an essay prize, a rhetorical essay prize, an oration prize, an English grammar prize, a mathematical prize, and a gold medal for scholarship. This plan is not "high toned," but it is satisfactory and popular. We graduate with the Regents' diploma only.

JOHN G. WIGHT.

GLENS FALLS ACADEMY.

Our classes are always small. They never yet have exceeded thirteen. This year we have ten. We have always at graduation assigned parts to all, limiting the time to seven minutes. We never graduate any whose scholarship is unsatisfactory, as we require an average of 80 per cent in everything. In our appointments we recognize only one, the one that is highest in scholarship and that one is always placed last on the program. We have generally awarded prizes at the time of graduation, such as have been offered by friends of the Academy, which are competed for by examinations. Last year we had five ten-dollar prizes. This year we have three of the same value. We also give a prize to the one having the highest rank, both in the graduating class and among those that receive intermediate and preliminary certificates.

I believe with Dr. Murray that it pays in an educational point of view to make considerable of these occasions, *i. e.*, carry them as far as you can and not overdo the matter

D. C. FARR.

JAMESTOWN UNION SCHOOL AND COLLEGIATE INSTITUTE.

We graduate from the Literary, (English, Academical and Classical) Instrumental Music, Commercial, Physical Culture, Normal, Drawing and Painting, and Industrial Departments—numbering in all 40 to 45 persons. The Literary section (usually 12 to 15) only are permitted to appear on the platform with essays. The other sections submit theirs without reading, to be kept on file in the Superintendent's office. The literary section all read from the platform their essays, 500 to 650 words, in the order decided upon by myself and the principal instructors together.

We have no prizes, no honors. Diplomas are granted by our Board to those persons who complete any specific course of instruction, also State Diplomas to those who pass the required examinations.

The alumni association has "anniversary exercises," consisting mainly of music and an address, on Thursday evening; and, on Friday, occurs an alumni re-union and banquet. The literary exercises here consist of necrology, poems and history.

The graduating exercises occur Friday A. M. at 10 o'clock, and occupy about three hours, including the exhibition of the graduating class in physical culture. In the class of '85 all the "literary and classical" graduates, fourteen in number, appeared.

S. G. LOVE.

ROCHESTER FREE ACADEMY.

Our system of appointments is based on scholarship and deportment combined. Ability to write and deliver are necessarily elements which go to make up scholarship. All our pupils must have one lesson in composition and elocution each week during the entire course. A record is kept of the daily recitation in both of these subjects, the average of which is made a permanent record for the entire year. Since there is but one recitation per week in the two subjects named, you will readily see that greater prominence is given to these studies involving but forty recitations during the entire year, than to the subjects of language or mathematics, involving say two hundred recitations each.

In all other subjects of the course including language and mathematics, the standing for record is made up equally of the average daily recitation and the final written examination.

The candidates for appointments at graduation are selected by the teachers, in the order of their relative rank. Such candidates, however, must have pursued either the classical or scientific courses of four years, or the English course of three years. There were 64 candidates for graduation in these courses of study last year. Two evenings were devoted to our graduating exercises last year in consequence of the large number, and 30 out of the 64 were appointed to take part in the exercises.

We shall select 16 out of 40 candidates this year, and the exercises will be completed in one evening. The limit of the graduating theme with us is fixed at 500 words, which gives opportunity for about 16 to appear and still keep the exercises within two hours. We have no other honors, save honorable mention for prosecuting work outside of the regular course of study. Candidates in the Classical course who translate 4,000 lines of Ovid without the assistance of a teacher, and who can pass a successful written examination upon it, are given honorable mention at graduation. In the same way pupils in the undergraduate classes may pursue extra studies or work in the laboratory, which will entitle them to honorable mention at commencement. We have found that this system meets with more general satisfaction on the part of pupils and teachers than any we have tried.

Z. P. TAYLOR.

SYRACUSE HIGH SCHOOL.

In the Syracuse High School, all students whose standing for the entire course is above 90, receive honor appointments. No appointments are given to those whose average for the course is below 80. Students between 80 and 90 have the privilege of presenting essays, and from these enough are selected to make, with the honor appointments, eight parts for the graduating exercises. The choice depends solely on the excellence of the essay, but pupils with weak voices or otherwise unfitted to read in public, may be excused, their names and pieces appearing in the programme. In such cases other essays are selected to make the number up to eight. No limit of length is fixed. The exercises with music usually occupy one hour and a half. This plan has been in use for several years. I might add that we graduate twice a year, the classes ranging from twenty-five to forty.

GEORGE A. BACON.

UTICA ACADEMY.

Our plan of choosing pupils to take part in the graduating exercises has varied from time to time.

Having a two, a three, and a four years' course, we give a preference to those who have taken the full four years' course. The size of the class has something to do with the matter. When the class is small, all who are willing may be put on the programme. When there is a large class, we assign the parts to one-half or two-thirds, according to *rank* for the whole course. This scale of rank is not strictly mathematical, but is made out according to a *general* estimate of the standing of the pupils in their respective studies. We are inclined also to take into account ability to write and to read—on the part of the girls,—and to *speak* on the part of the boys. The boys are *all* generally brought on the stage because their number is not as large as is that of the girls. Among the latter there are often, or not unfrequently, found those who from timidity or weak voice prefer to be excused. I have some times adopted the plan, in such cases, of printing on the programme the names of meritorious students and marking them "excused."

We assign the closing part, as a *valedictory*, to the one whom we consider, on the whole, the best student, whether boy or girl. The arrangement thus made in general according to our best judgement, usually gives satisfaction. There will be on

any plan occasional instances of dissatisfaction, but I make it a rule, to which I have uniformly adhered, not to change my programme once arranged. While we *mark* for recitations so as at any time to know just where each pupil stands in each study, we do not have a first scholar, and a second scholar, etc., absolutely. Our aim is to keep up the pupils to as high a standard as possible, letting the best do and appear the best, as they will, while even the poor or indifferent are urged not to fall below a certain average standard of attainment. A prize system we have never adopted nor favored. It so happens this year that a citizen not connected with our schools has offered a prize of ten dollars for the best essay upon the subject of "The Prevention of Cruelty to Animals." These essays will be examined by some one not of our school, and the successful essay will be read or spoken at our graduating exercises. While I do not object to the occasional offering of a prize, as above mentioned, I should not care to establish definitely the prize system in our Academy.

I desire to add, as an integral portion of this statement, that the gradual tendency at this Academy has been to make less rather than more of school exhibitions, to seek to fix the student's attention and concentrate his or her efforts upon the regular daily work. This we incline to deem more valuable and more wholesome as a regular expenditure of force, both on the part of the pupil and the teacher, and also as more valuable for the whole school, which in our opinion, should be the aim of the instructor, rather than to bring forward a few at stated times to parade before the public.

G. C. SAWYER.

NOTES.

THE ACADEMY is mailed to all subscribers promptly on the first of the month. Subscribers should inform us if it is not received within two days of the time it ordinarily reaches them.

The New York Assembly has passed the bill providing for the appropriation of twenty thousand dollars annually to the Metropolitan Museum of Art and the American Museum of Natural History. It is expected that it will soon be favorably reported by the Senate Committee and become a law.

We cannot forbear to rally the excellent *Revista Pedagogica Italiana* on the accomplishments of its exchange editor. Having received a copy of THE ACADEMY, "with Mr. Thurber's compliments," it alludes to us in courteous phrase, and expresses sincere thanks to "Signor With Mr. Thurber, to whom it is indebted for this hand-some remembrance."

In a recent lecture at Harvard, Dr. Farnham called attention to the fact that the sanitary system of England had caused a decrease in the annual death rate of that country of 1,144 to every million inhabitants. In Massachusetts also the death rate has decreased during the last four years. It is a notable fact, however, that deaths from brain diseases have increased and are increasing 200 per cent faster than the population.

The new Science hall at Smith College will be dedicated on Tuesday of Commencement week, (June 20). The donor's name will be announced at the opening. Prof. J. P. Lesley of Philadelphia, will deliver the principal address. The building is elegant and commodious, and the chemical and physical laboratories, as well as the rooms for the biological and geological collections, have the merit of being well lighted.

James Johnstone, of Edinburgh, Scotland, has been making investigations from which he deduces that electricity is an *element*.

His theory is based upon the fact that oxygen can be changed into ozone by means of electricity, hence, in his opinion, the latter is a substance. Even if oxygen could be changed into ozone by no other means than by electricity, still his conclusion does not necessarily follow. It happens, however, that ozone can be obtained from oxygen without the agency of electricity as well as by its employment. The arguments of Mr. Johnstone show that he confounds a force with the *results* of a force, and he might with equal consistency claim that light is an element because it can act as an agent in chemical combinations.

When we read the contents of the March *Forum*, realizing that a magazine with such a first number incurred a fearful responsibility, we wondered what names would appear in the next issue. The second number presents an array of names not less famous, and the articles are even more readable. "The Child and the State," "What the Roman Catholics Want," and "Our Boys on Sunday," will perhaps come closest home to teachers, always excepting T. W. Higginson's capital, "How I was Educated."

The price of the *Forum* (\$5) stands between it and most teachers. But every teacher ought in some way to secure the reading of it by forming a club, or by some other expedient, if unable to take it alone.

The Political Science Quarterly, edited by the Faculty of Political Science of Columbia College and published by Ginn & Co., forms a genuine addition to periodic literature. It is a reason for rejoicing that interest in political science has reached a point when such a magazine is possible. The papers commanding perhaps the widest reading and possessing the most general interest are those on "American Labor Statistics" and "The Berlin Conference." The former is specially valuable in showing how meagre are the data from which doctrinaires and demagogues draw their inferences, and emphasizes none too strongly the desirability and difficulty of obtaining adequate statistics as well as the necessity of generous governmental

support. It contains in compact form an account of the growth of statistical bureaus in this country.

The work of Dr. Pasteur, in the direction of preventing rabies, has not only drawn the attention of the masses, but also has aroused inquiry on the part of prominent scientific men in various parts of the world. Commissioners have been selected to visit Paris and inspect Dr. Pasteur's methods. The English government has selected Sir James Paget, T. Leander Brunton, Sir Henry Roscoe, and Burdon Sanderson. Germany sends no less famous men than Virchow and Kock, and the Archduke Charles Theodore, of Bavaria, a physician of prominence, goes as an individual investigator.

One of our younger physicians, Dr. Valentine Mott, of New York City, has recently returned from a reported visit to Dr. Pasteur, with a design of employing his methods in this country.

Should Dr. Mott develop talent in any degree comparable with that of his illustrious predecessor, whose pioneer work in the department of surgery made him famous on both continents, we may expect at least that Dr. Pasteur's methods will receive a fair trial at his hands.

Thanks to the skill and patience of Professor Stoddard, of Smith College, we are able to look upon the features of Sophia Physics Smith, the ideal girl of the class of '86. Professor Stoddard has succeeded in producing a composite photograph so perfect as to demonstrate the possibility of combining all the faces in a class into a single picture that shall retain every line of each, and yet shall present an ideal face entirely unlike any one of the originals.

Negatives of twenty-eight young ladies were taken with great care that the eyes and mouth in each should occupy exactly the same position. Each of these negatives was allowed successively to act on a plate for one twenty-eighth of the time necessary to produce a good negative. The result, as infallible as the laws of light, is an exact reproduction of the likeness of every girl, but all are so combined as to suggest no marked resemblance to any individual. The resultant maiden is very comely and pleasant to look upon, and one cannot help feeling that the ideal girl at Smith would be no bad representative of the best type of our young womanhood.

The May number of Mr. Mowry's *Education* contains much matter of high value to teachers. Prof. H. B. Adams' paper on "History in American Colleges," and A. T. Smith's "Notable Features of the English System of Elementary Education," ought especially to have a deep interest to every teacher. The other articles are bright and attractive, and the whole number is a credit both to the practi-

cal educator who edits it and to the teaching fraternity that sustains such a magazine. Being published in a provincial city somewhat remote from the great centers, it labors under certain material disadvantages doubtless beyond its control, not being able to command near at home those printing facilities so readily within reach in large cities, and so it suffers to a degree in outward appearance. In the style and matter of its contributed articles, however, in its editorial department, in fact everywhere that headwork avails, it is easily in the front rank.

Mr. John Allyn, 30 Franklin street, Boston, announces a new edition of *Cæsar's Commentaries* (complete), which is to be "the finest example of a classical text-book ever issued in this country." Judging from the advance sheets mailed us, we should say that the book bids fair to make good the claim. It is to be ready in July.

On May 28, the bill for the increased Regents' appropriation had its final hearing before the Governor. His action upon it is not yet known.

This bill was introduced into the Assembly February 8, by Mr. Platt of Dutchess County, chairman of the Committee on Education, referred to the Committee on Ways and Means, and, after a hearing from the friends of the bill, was reported favorably. It was reached May 4th, ordered to a third reading and passed with but one dissenting vote. In the Senate it was referred to the Literature committee, but only the chairman was present at the hearing, and he simply reported it for the consideration of the Senate. Friends came to the rescue, however, and on May 11th, on motion of Senator Hoysradt, it passed to a third reading and was carried without a dissenting voice.

The bill originally provided for an increased appropriation for annual distribution among the secondary schools of \$75,000, but the amount was afterwards made \$60,000. Among the senators who were especially active in securing the passage of the bill were those from Columbia, Erie, Onondaga and Ulster.

There is a growing tendency to appeal to state and nation to aid in the support of education. While much may be said for the claim of the advocates of State aid that the permanent State, and not the towns and cities with their artificial and shifting boundaries, and with their changing population, increasing in the cities and actually or relatively decreasing in the towns, should be the territorial unit for the collection and distribution of money for educational purposes, there lurks in this policy the same danger to the town as threatens those States which would rely upon national aid for the support of

their public school, namely, the loss of self-reliance and self-respect, and the destruction of the sense of individual responsibility in the matter. An example of the above-mentioned tendency is the attempt now making to secure the passage of a bill by the Massachusetts legislature, providing for the assessment of a half-mill tax, the proceeds of which are to be distributed among the towns and cities in proportion to the number of children of school age. A result of such a law would be that Boston, Newton, New Bedford and Springfield, and some forty towns would pay out more than they received; many would neither gain nor lose; and the rest would have their school fund increased. The measure is, therefore, virtually one to tax four cities and some forty towns of the Commonwealth to aid its poorer portions, and can be justified only on the ground that the safety of the State, and, therefore, of these communities so taxed, depends upon the intelligence of all voters. The bill is now in the hands of the Finance Committee of the legislature.

At Ann Arbor, Mich., February 27th, a meeting of teachers was held to consider the feasibility of organizing and maintaining a teachers' club whose special province should be the consideration of high school and academic work, and whose membership should be made up largely of the younger school and college men of the State. An organization was readily effected under the name of "The Michigan Schoolmasters' Club," with Principal L. C. Hull, of Detroit High School, as president, Supt. Leroy Halsey, of Battle Creek, as vice-president, and Prof. B. L. D'Ooge, of Michigan University, as secretary and treasurer. Membership is limited to college men or those engaged in secondary instruction in Michigan, an annual fee of one dollar provides for necessary expenses, and three meetings are to be held at Ann Arbor during each scholastic year. The president, vice-president, secretary and two other members form an executive committee to provide a program for each meeting.

The first regular meeting since the organization, was held May 1. The topics discussed were Secondary Instruction in English, Science in the High School, Psychology in the High School; from the standpoint of the college, Mental Training and Moral Training, Methods of teaching Modern Languages, the Educational Value of Latin, and Biological work in High Schools.

We understand the papers are all to be published in the Michigan School Moderator, Lansing, Michigan.

At a recent meeting of the Board of Overseers of Harvard College, certain resolutions were adopted, of which the two following concern preparatory schools :

I. That in the opinion of the board of overseers, it is advisable to permit a scientific substitute, in accordance with the terms of this report, to be offered by applicants for admission to the college for either Greek or Latin, one of these two languages always being required, and provision being made for elementary instruction in Greek and Latin, as elective in the college course.

II. That in the opinion of the board of overseers, in addition to the present requisitions for admittance to the department of history, a proper knowledge of the outlines of universal history and of the history of the United States should also be required.

The first resolution is undoubtedly due to a public demand ; but it is a disappointment to many, that instead of a scientific substitute or as an alternative with it, a modern language could not have been allowed. The old notion seems still to linger at Harvard that the acquisition of French, or German, or Italian, or Spanish, is but the work of a leisure hour.

The second resolution is a step in the right direction. But the history therein required takes the place of no present required study in the preparatory schools : it adds two more branches to the present courses of study. If, as it is claimed, the schools are doing now all that they can without overburdening the pupils, then to make way for these new studies, something must yield, and the question is, what shall that something be? The solution of the difficulty in the best preparatory schools will probably be, to take less time for Latin and Ancient History ; for in these schools more work is done in Latin than is required for the college examination, and the Ancient History is taught more thoroughly in its details than is perhaps necessary.

The twenty-fourth Convocation of the University of the State of New York will be held in the Senate Chamber of the Capitol at Albany during Tuesday, Wednesday and Thursday, the 6th, 7th and 8th days of July, 1886. The Convocation will be opened at 10:30 A. M. on Tuesday. The other morning sessions will begin at 9:30, the afternoon sessions at 3:30 and the evening sessions at 8:00. A meeting of the "Associated Academic Principals of the State of New York" will be held on Tuesday, July 6, at 5 o'clock P. M.

The programme seems to us the best we have ever seen offered, reflecting great credit on Principal Bradley and his very efficient committee, who have had the whole matter in charge. We take this occasion to call special attention to the meeting of the Associated Academic Principals on Tuesday afternoon at five o'clock. At this meeting important business will come up, and it is highly desirable that as far as possible every principal be present, or at least be represented by a duly empowered proxy.

Joel Dorman Steele died at his home in Elmira, May 25, of *angina pectoris*. Except slight periods of faintness he had had no special sickness, and was walking on the lawn a half-hour before his death. Entering the house just before supper, he sat by the open fire in his study when the attack came, and there he died.

Dr. Steele was born at Lima, N. Y., and had just passed his fiftieth birthday. He was educated at Genesee College, taught for several years, was captain of Company K, eighty-first New York regiment, during the civil war. A severe wound at Seven Pines, together with a fever which followed, forced him to resign his commission. Some time after returning home he became principal of the Elmira Free Academy. A dozen years ago he broke down with over-work. Since that time he has carefully husbanded his strength, working constantly and systematically. His delicate health forced him to forego many attractive engagements and much congenial pleasure, but he never allowed it to shut him out from the closest intimacy with the brotherhood of teachers, and failing strength abated not a jot his interest in them and all their concerns. We all remember, at the close of the Holiday Conference last December, his allusion to himself as on the downward slope of life and his earnest wish that he might still be counted one of us.

Were these lines to be read only by New York teachers, they would need no eulogy of Dr. Steele. His genial face and cordial greeting are familiar to us all. Many of us have known his ready helpfulness on more than one occasion. But for those to whom he was personally a stranger, we will add a few words. He was a man of singularly generous and helpful instincts, which he fostered and encouraged till they thoroughly possessed his being. It was quiet, unostentatious kindness, never heralded or highly-esteemed by himself, known only to a few, but catholic in its spirit and far-reaching in its scope. It was not merely the liberal use of money where money was needed, though every year he gave away much more than he spent himself, but he gave to every enterprise which he deemed worthy of support constant thoughtfulness and express words of encouragement.

It has been easy for scientific specialists to speak slightly of Dr. Steele as a writer of school books. Neither he nor his friends were unconscious of defects. But this may truthfully be said: his books were issued at a time when scientific teachers in secondary schools did not exist, and when strictly scientific books would have failed. His books were popular and they made science teaching popular. The more strictly scientific method could not have first prevailed, and the popular one will yield only as fast as teachers and schools are ready for the scientific one.

ANNOUNCEMENTS OF NEW BOOKS.

Ginn & Co., Boston, announce for June, Scott's *Ivanhoe*, classics for children series, Mrs. Knox-Heath's *Elementary Lessons in English, Pt. II.—The Parts of Speech and how to use them. The Practical Elements of Rhetoric*, with illustrative examples. By Prof. John F. Genung, Ph. D., of Amherst College. *The Beginner's Latin Book*. By William C. Collar, Head master of Roxbury Latin School, and M. Grant Daniel, Principal of Chauncey Hall School, Boston. For July, E. Eysenbach's *German Grammar*, revised by William C. Collar, of Roxbury Latin School. An Illustrated Beginner's Book in French. By Sophia Doriot. *The Philosophy of Wealth*, Economic Principles Newly Formulated. By Prof. John B. Clark, of Smith and Amherst Colleges.

BOOKS RECEIVED.

The Modern Spelling-book by J. N. Hunt and H. I. Gourley, New York : Taintor Brothers, Merrill & Co.

A Summary of American History. For the use of schools. New York and Chicago : A. S. Barnes & Co.

Sheldon's Complete Arithmetic, with oral and written exercises. New York and Chicago : Sheldon & Co. 1886.

Modern Languages in Education. By George F. Comfort, Dean of the College of Fine Arts and Professor of Modern Languages in Syracuse University. School Bulletin publications. Syracuse : C. W. Bardeen, publisher. 1886.

An Exposition of the Errors and Fallacies in Rear-Admiral Ammen's pamphlet entitled "The certainty of the Nicaragua Canal contrasted with the uncertainties of the Eads Ship Railway." By E. L. Corthell, C. E. April, 1886. Washington : Gibson Brothers.

The Elements of Chemical Arithmetic, with a short system of Elementary Qualitative Analysis. By J. Milnor Coit, Ph. D., Master in St. Paul's School, Concord, N. H. Boston : D. C. Heath & Co. 1886.

A capital little manual of 89 pages, designed for supplementary work in descriptive chemistry. The definitions in part first are specially admirable. The work is thoroughly practical and can be used with any good chemistry.

Essays on Educational Reformers by Robert Hebert Quick, A. M. Reading Club Edition. Syracuse : C. W. Bardeen, Publisher, 1886.

"It is clear that in whatever it is our duty to act, those matters it is our duty to study."—DR. ARNOLD.

In surveying the vast mass of trash foisted upon the teacher in the guise of educational literature, one may be pardoned a degree of disgust or even an unwillingness to examine. If a teacher proposes even to look over the various schemes, systems, methods and helps, introduced with high sounding recommendations, he will have little time for other work, and his brain will be in a muddle compared with which absolute lack of everything but common sense will seem the height of wisdom.

A knowledge of the various movements, however, which in the the great perspective of the centuries loom up as features in the picture of progress, is to the last degree important. A statesman need not stop to consider all the transient expedients offered by his contemporaries, but no one ever became a statesman without a

working knowledge of the achievements of the past. If we were asked to name three books that should be in the hands of every educator, one would surely be Quick's Educational Reformers. There is not a name in the book of which any teacher ought willingly to be ignorant.

For general reading the present edition has points of superiority over others in its cheapness, convenient form, full index, and translations into English of all passages which in former editions appeared in foreign languages.

A History of the United States for schools, with an introductory history of the discovery and English colonization of North America. By Alexander Johnston. New York: Henry Holt & Co.

The title of this book, as given above, is accurate. It is a history of the United States, and not of the colonial period. Of its 412 pages of text, only the first 82 are used for the history of the colonies to 1765. The rest of the book is written in the belief that "the typical school boy must get his political, economic, and financial education from his school history of the United States, if he is to get it all." "The design of the book," says the author in the preface, "is to group those events which seem likely to shed light on the responsibilities of the citizen to the present or future, and to give the student the light in connection with the event." And this program he has carried out with great success. He tells briefly, but fully enough and suggestively, the story of the wonderful development of the United States with its causes, and explains the economic problems that have grown out of that development. Other excellent features of the book are the attention it calls to the location of places mentioned in the text; its general maps showing the growth of the country, and its small maps for special locations and campaigns; the chronological summaries at the end of each chapter; its cross-references; its brief summaries of State histories and the biographies of the most prominent men; the history of inventions, such as the locomotive, screw-propeller, printing-press, and of every day terms, such as, sub-treasury, tariff, clearing-house. Of all the school histories of the United States this one is by far the best, and contains enough to satisfy the demands which the colleges are likely to demand in this subject from candidates for admission. It will therefore be of special value to preparatory schools.

Outlines of Mediaeval and Modern History. A text book for High Schools, Seminaries and Colleges. By P. V. N. Myers, A. M., President of Belmont College. Boston: Published by Ginn & Co. 1886.

This book is a continuation of Mr. Myers' *Outlines of Ancient History*. In 720 well printed pages the author attempts to give a connected account of European history from 476 A. D., to the present time. Mediaeval history he divides into two periods; the dark ages and the age of revival. Modern history he considers under The Era of the Protestant Reformation, 1492-1648, and the Era of the Political Revolution, 1648 to the present time.

Such a work gives no opportunity for going outside the beaten track for original investigations of any kind. We can expect the author to tell a connected story in good English, showing the rela-

tions of events as far as possible, giving each its due prominence, characterizing briefly men and movements, accepting and condensing the work of others, and honestly indicating mooted points. This the writer has done and done well. The narrative moves steadily along, the English fails a little in grace at times, but not in perspicuity, the controverted points are fairly stated, and the conclusions are well sustained. Altogether there is a place for just such a book. The author seems to indicate that it is intended for rather advanced pupils in secondary schools. The facts of history can be learned by the youngest student, the philosophy of history taxes the highest intellect of the most mature. This work seems to us not too advanced for ordinary pupils of academic grade.

The excellent historical maps, thirteen in number, form a valuable feature of the work.

Teacher's Hand-Book of Psychology on the basis of the "Outlines of Psychology," by James Sully, M. A., N. Y.: D. Appleton & Co. 1886.

Sir William Hamilton says that the end of philosophy is to philosophize; but in this book Mr. Sully shows that, in its bearing on educational problems, psychology, at least, has a more practical end. Here the teacher will find the principles that underlie his work carefully explained. The methods, on the other hand, are left, as they always should be, to his own individuality and that of his pupil.

Unlike many works on the subject, the book has not been written to show the author's learning. Simple terms and clear language are used. The reputation of a philosopher for depth is often due, in part, to the obscurity of his style. The weary reader sometimes gives a carefully-pondered sentence credit for meaning much more than the writer intended. But the fact that we cannot see the bottom of a muddy stream proves nothing in regard to its depth. In this book we lose sight of the words in the thought. To give a clear view of a subject diagrams are sometimes used and so successfully that we wish there were more of them.

Among the chapters most interesting to the teacher, are those on attention and memory. The function of the will in attention is well brought out. The will is, in fact, the person. In educating the will, then, we educate the person. The practical suggestions on the exercise and improvement of memory deserve notice.

More than ordinary space is devoted to the discussion of the emotions, but not more than is due the importance of the subject; for it must be admitted that they may be the most powerful aids or the most powerful drawbacks to the educator. Mr. Sully has done his part toward showing us how we may use, for the child's mental improvement and happiness, the feelings of curiosity, of rivalry, of the desire of praise and, most of all, of sympathy.

Some of Mr. Sully's definitions fail in fine distinctions. For instance, he appears to make no distinction between action and willing. We look in vain for irreproachable, philosophical utterances in his definitions of consciousness, perception, reasoning, and the will. Considering the aim of the work, however, this is little to be regretted. There are references to other books at the end of each chapter. There are also two appendixes, one upon the periods of development and the other upon the measurement of faculty.

A Satchel Guide for the vacation tourist in Europe. With maps. Revised annually. Boston: Houghton, Mifflin & Co. 1886.

Probably this is the best single book for the traveler who wishes to make a vacation trip abroad. It is handy, inexpensive, and has good maps with plans of London and Paris. The introductory hints are good (though for the vacation tourist we can conceive no use for a passport) and the traveler's calendar and list of famous pictures are convenient and helpful. On the routes nothing is introduced which one can well afford to miss. In some cases, notably Venice, the book will meet all the requirements of the traveler. England seems to us the least well done, and churches seem to be the author's weak point. He doesn't mention for instance the exquisite enclosed cloisters of Gloucester cathedral, the most perfect in England, and he speaks of Ely as the longest gothic church in Europe. Salisbury close he makes contain "several hundred acres" although it is less than half a mile square. Wells cathedral, he says, "is one of the largest in the kingdom" and on the next page "Exeter, inferior in size to many in England," Exeter being in reality a little larger than Wells. The weakness crosses the channel with him for he finds the beautiful Romanesque cathedral at Speyer 600 feet long. Switzerland is better done, in fact it is not easy to see how it would be improved upon in the same space. Yet we note an occasional slip, as where he says the traveler may "take a carriage from Interlaken, via Lauterbrunnen, for Kandersteg," and even names the price!

In general the best routes are indicated and the book on the whole is freer from mistakes than guide books usually are, always excepting Baedeker; only in a work revised annually for fifteen years, one expects to have minor errors eliminated. Occasionally, too, one notices a change since the first edition was brought out for which this edition hardly gives credit, for example, the implied criticism on second class carriages in Italy, page 199, seems hardly needed now.

OUR FIRST VACATION.

We have put our room in order, paid our bills, packed our luggage and come to say good-bye. We have enjoyed the term very much. Five months ago with great diffidence we greeted you for the first time, and took our place in school. We wondered then if we should be welcome. We were not sure that we should like you or you us. We meant to work hard, but we were not certain that we could earn enough to pay our way. We did not know that there would be work for unskilled hands, no matter how willing, and we feared our country breeding might stand in our way.

All that is settled now. Our welcome has been hearty and general. We like the school. We can pay our way. There is work for willing hands as little skilled as ours, and another term we shall better know how to find it and how to do it. We see, too, that our country dress is no barrier to a courteous reception and fair treatment. And so you will find us back again in September ready for work once more.

This was our first experience and we had much to learn. Like many an other new comer you have known, we have found the field wider and the work more laborious than we expected. We came with a fixed purpose, we had definite plans and thought to reach a certain goal. But we were all in the dark as to a thousand things familiar enough to others though strange to us. We have accomplished only a part of what we set ourselves to do, but we are in no wise discouraged, for we see that success meant much more than we anticipated, and that we might easily have met with utter disaster.

Perhaps we have learned better to know our own limitations and to recognize more exactly the possibilities within our reach. We have found ready helpers and are sure to find more when we see definitely in just what directions their help can serve our readers. In this number we begin a department of "Interchange," devoted exclusively to the inside work of the school. In this department hereafter, the topics will be announced a month in advance, and communications from our readers will be gladly received. Principal G. R. Cutting, of Auburn, N. Y., will take direct charge of this department, and to him all communications should be addressed. For the present, all other departments will be merged under "Notes," but it is our purpose to extend and classify this material so as to include eventually a department of mathematical, scientific, literary, and foreign notes. *THE ACADEMY*, however, is rather a growth than a creation. Our fellow-workers will, we are sure, be satisfied to see it grow, and not complain that it has not come into existence like Minerva.

The editor takes this occasion to thank most warmly those teachers who by encouraging words and substantial help have made hopeful and pleasant what otherwise must have been a discouraging and wearisome task, and he would express no less warmly his thanks to the publishers who have not only given to *THE ACADEMY* its financial success, but also hearty words of encouragement and continued assurance that an independent journal of secondary education is as earnestly desired and will be as fully supported by them as by the teachers for whom it is primarily designed.

THE ACADEMY:

A JOURNAL OF SECONDARY EDUCATION.

DEVOTED TO THE INTERESTS OF HIGH SCHOOLS, ACADEMIES AND ACADEMIC
DEPARTMENTS.

GEORGE A. BACON, . . . MANAGING EDITOR.

VOL. I. SEPTEMBER, 1886. NO. 6.

*ON THE PRESENT ASPECT OF CLASSICAL STUDY.**

To some the special line of work to which my own life has been devoted may seem to have had its day; and to plan for the future of Greek is to plan for an elaborate structure on the foundation of some table rock, destined at no distant time to fall and disappear on the restless current of modern life. A monument was erected some years since to the memory of the last old woman that spoke Cornish; and it would require no great stretch of imagination on the part of some of our friends to fancy that some youth may be present here to-day who shall live to see the cremation of the last successor of Sir John Cheke on this side of the Atlantic; of the last old woman, trousered or untrousered, that shall have discharged the office of a professor of Greek in an American university. People who have reached a certain age, and have become somewhat reflective and prophetic, generally console themselves with Hezekiah's words. But I cannot content myself with the thought that there will be peace and truth in my days. There has not been much of either of these commodities in my first half-century, and I do not expect the market to be glutted with them in my second. Surely there is no sign that there will be any peace about Greek, or truth about Greek, in any period that I can reasonably hope to reach. But the peace and the truth that may be denied me from without are vouchsafed me

* Extract from an address delivered at the tenth anniversary of the Johns Hopkins University, by Prof. B. L. Gildersleeve. Reprinted from *Science*.

abundantly from within ; and while many of my fellow-workers are in woe for the silver shrines of Diana, and mourn for the abandonment of Greek, and sorrow that the trade in text-books languishes, I am serenely standing where I stood many, many years ago, when I published my first article on the 'Necessity of the Classics,' a title not to be confounded with the 'Necessities of the Classics,' about which one hears far too much. I live in the abiding assurance that what is inwrought in the structure of our history and our literature must survive so long as the history of our race and the history of our language shall survive. To disentwine the warp of the classics from the woof of our life is simply impossible. One mediæval writer every one must know, and, measured by modern standards, Dante was not a classical scholar of the first rank. His perspective of antiquity was false, his estimate of the poets of the past was far from just ; and yet what is Dante if you loosen his hold on the classic time ? I will not speak of Milton, steeped in classic lore : I will speak of Shakespeare. None but those who have read Shakespeare with the eye of the classical scholar know how much the understanding of Shakespeare is dependent on training in the classics ; and more than once when I have hesitated as to whether it was pedantry to use a Greek word in my discourse, I have turned to Shakespeare.

Is this the judgment of a man who can see only through his own narrow casement ? Scarcely had I set down those words, when the following passage fell under my eye. It is to be found in the recent introductory lecture of the professor of poetry in the University of Oxford. "The thorough study of English literature, as such,—literature, I mean, as an art, indeed the finest of the fine arts,—is hopeless unless based on an equally thorough study of the literatures of Greece and Rome. When so based, adequate study will not be found exacting either of time or of labor. To know Shakespeare and Milton is the pleasant and crowning consummation of knowing Homer and Aeschylus, Catullus and Virgil ; and upon no other terms can we obtain it."*

To be sure, we have promise of mountains and marvels if we break with the past. What satisfied us in our boyhood no longer suits the fastidious taste of the present ; and the Phoebus Apollo of our youth, clad as to his dazzling shoulders with a classic cloud, is shown up as nothing better than a padded dandy. Our adored Thackeray is no longer faultlessly attired in a garb of perfect English : he is simply a stylistic old beau. The plots in which we once took delight are nothing but vulgar tricks, and the lifting of a tea-

* F. T. Palgrave, 'Province and Study of Poetry.'

kettle lid and the setting down of the same are intrigue enough for the conduct of a two-year-long novel. All this new literature has nothing to do with the classics. Far from it. And yet I am not at all shaken by the self-satisfied edicts of those who rule so large a portion of the reading world ; and I maintain with unwavering confidence that all healthy literature must be kept in communion, direct or indirect, with the highest exemplars of our Indo-European stock ; and if any thing could prove the necessity of a return to healthy human nature, with its compassed form, its fair red and white, it would be the utter wearisomeness of so much recent fine writing, in which there is no blood, no sap, nothing but division and subdivision of nerve-tissue. 'A pagan suckled in a creed outworn' is a joy and delight in comparison with the languid, invertebrate children of the great goddess Anaemia.

I have watched with much interest the development of the study of artistic composition in English during the last few years. Indeed, it would have been necessary to stop one's ears to keep out the thrilling cicada-sound of 'art for art's sake,' and all the theoretical buzz of aesthetic criticism. The interest has not been unmingled with amusement, because the apostles of progress are preaching very old doctrine,—a doctrine which I shall be glad to re-enforce, so far as I can, before I acquit myself of this function. Art for art's sake involves the very hardest, the very driest study, the very kind of study for which we philologists and grammarians are contemned. The accomplished master in the art of dipping, who delighted the world a few weeks since by his 'Letters to Dead Authors,' made his swallow-wing strong on the Elysian fields of the classics ; and those who should hold him up as an example of the kind of classic scholar we ought to have, little know to what severe studies is due that easy grace. It is so cheap to talk about gerund-grinding and root-grubbing, as if gerund-grinding did not lead to the music of the spheres, and root-grubbing to the discovery of the magic moly that guards against the spells of Circe, of 'euphrasy and rue,' that purge 'the visual nerve.' He who neglects the elements lacks the first conditions of the artistic life. In the old times great artists did not disdain to prepare their own varnishes ; and the old paintings stand fresh to this day, while many of their modern rivals, scarce a generation old, are falling into decay beyond the hope of recognition. The fair dream was embodied in machine pigments, and the machine pigments flake off, and with them the fair dream vanishes. If grammatical research is pressed with regard to truth, to that which is, then the gerund-grinding, as the color-grinding, not only has its warrant in itself as a useful exercise, but it is sure to be available for

higher purposes ; and if it is not given to every one to make use of grammatical results for artistic ends, still no organic fact is without its value, none will fail of its appropriate place in the completed system of art as of science. To me, as an ardent lover of literature, as one who was led through literature to grammar and not through grammar to literature, the fairest results of a long life of study have been the visions of that cosmic beauty which reveals itself when the infinitely little fills up the wavering outline, and the features stand out pure and perfect against the sky of God's truth. Now, for the study of literature as an art, we have every thing to learn from the old critics ; and what our own Sylvester, our own Lanier, have re-discovered as to the science of verse, is a chapter from antique rhetoric. Mr. Lowell has recently pointed out the great secret of Gray's abiding popularity. That consummate master did not disdain the close analysis of the sensuous effect of sound ; and the melody of Coleridge is due in a measure to a conscious though fitful study in the same line. Of late an author, whose charm of style was first appreciated in this country, has written an essay in which he applies phonetic analysis to the works of our great prose writers, and strikes the dominant chord of what seems unconscious music. The essay might have been written in the beginning of the first century as well as the end of the nineteenth, and have been signed Dionysius of Halicarnassus as well as Robert Lewis Stevenson.

Whether, then, it be for the historical unity of the race, whether it be for the human sanity of classical literature, whether it be for the influence on form either as example or precept, there is no danger that the ancient classics will be displaced from the list of studies necessary for the highest and truest culture. Nor do I think that the so-called hard and dry and minute research in this and cognate provinces of study will ever be abandoned in favor of a mere bellettristic phrase-mongery about half-understood beauties. What is hard, what is dry, what is minute, depends very much on the spirit in which it is approached by the student.

Some years since, I attended a lecture by a great master. The theme was the vanishing of weak vowels in Latin. Candor compels me to state, that, although I pride myself on being interested in the most uninteresting things, I should have chosen another subject for a specimen-lecture. Candor compels me to state also that I very much question whether the illustrious teacher would accept all his own teachings to-day, such progress do grammarians make in devouring themselves as well as one another. I was much struck with the tone in which he announced his subject. It was the tone of a man who had seen the elements melt with fervent heat, and the

weak vowels vanish at the sound of the last trump. The tone, indeed, seemed entirely too pathetic for the occasion ; but as he went on and marshalled the facts and set in order the long lines that connected the disappearance of the vowel with the downfall of a nationality, and great linguistic, great moral, great historical laws marched in stately procession before the vision of the student, the airy vowels that had flitted into the nowhere seemed to be the lost soul of Roman life, and the Latin language, Roman literature, and Roman history were clothed with a new meaning. And so we of the language departments do not intend to be disturbed in our work by criticism on the arid details of our courses ; nor, on the other hand, are we unmindful of the larger and more popular aspects of the wide field of culture which we occupy.

There is no form of art, no phase of philosophy, of ethics, no development of physical science, that is alien to the student of language ; and the student of physical science, in his turn, needs the human interest of our study to save his life from an austere and merciless quest of fact and principle in a domain where man enters only as a factor like any other factor. But first and last, the scientific standard must be upheld for the university man, be he a student of letters, be he a physicist ; and that standard is the absolute truth, the ultimate truth. ' Nothing imperfect is the measure of anything,' says the prince of idealists.

THE FRENCH TEACHER'S HELPS.

However well prepared one may be to undertake the teaching of French, need of further research is sure to arise. Curiosity as to the origin and meaning of words, which is the mark of every language teacher, must be supplemented in the teacher of modern languages, by zealous efforts to ascertain and reproduce the sounds, defective command of which causes a person otherwise well educated to appear awkward and half-trained. The habit of clear articulation once formed, and mastery of the peculiar French sounds once attained, mistakes will yet be made, because the French language is not always pronounced as written, and differences in pronunciation must be taken into account that have no signs in print. The teacher therefore never learns French so well as to be exempt from constant study. Intercourse with cultivated French persons is of the utmost importance to one who means to strive for fluency and freedom in his use of the language. But this intercourse cannot always be had, and even when it can, is an insufficient resource for a teacher of studious

habits. Books must be the final resort, and the presence or absence of a good selection of books may make the difference between conscious competency for one's work, and that feeble half-certainty from which not a few teachers of French never emerge.

We note a few easily accessible aids to French study that in a long experience we have found most fruitful of help.

First we name *Litttré's* large dictionary in four volumes. Too full for hurried work, this dictionary is indispensable for good work. In its comprehensiveness, its thoroughness, its abundant citation of passages, its analysis of various meanings, its history and etymology of words, and, above all, in its perfect clearness, it is a marvellous achievement of single-handed lexicography. It is printed moreover in one uniform type, without any complicated system of signs and symbols, so that it is easily readable. It should not however be used for pronunciation.

Sach's French-German dictionary will be found sometimes to supplement even *Litttré*. (See ACADEMY for April, p. 113).

Bellows' French and English pocket dictionary, small as it is, shows a wonderful tact in explaining modern French, and has a very clear method of indicating pronunciation, in respect to which it may be implicitly trusted. It is a gem of printing, and as a specimen of *multum in parvo*, is surpassed by few books.

Lesaint's treatise on French pronunciation should be perpetually in the French teacher's hands. No one can pronounce his French so well as not to gain insight and information from this work. As a treatise, it is systematic, classifying the various sounds of the letters and combinations in such a way as to enable any one who studies it to form comprehensive views, and yet it gives separately, with distinctly figured pronunciation, every word whose sounds can possibly need separate discussion.

Of *Brachet's Etymological Dictionary*, the dictionary proper is hardly necessary to one who possesses *Litttré*, but the introductory essay on the development of the French from the Latin is a sufficient presentation of this important and interesting subject.

Morinières's "French Prepositions and Idioms" furnishes valuable training in the matters named in its title. These fine points in the use of words and phrases are not to be found in grammars or dictionaries. They are found only in actual language. By collecting and grouping these *idiotismes* the author furnishes the means for that kind of advanced study that distinguishes the proficient from the tyro.

The monthly French paper published for several years by M. Jules Lévy under the name of *Le Français* was, during its continuance, an.

invaluable aid to the enthusiastic French teacher. That *Le Français* was allowed to die for lack of support betrays a discreditable blindness to their own interests in those for whom Mr. Lévy labored. We still should think that a smaller and cheaper paper, serving as a medium for queries and answers and addressing itself solely to teachers and advanced students, might yet find an appreciative public.

The books named above stand at the head of our list of French helps, which however has many others lower down. Perhaps some other reader of the ACADEMY will, for the general good, add to the list from his own experience.

SUGGESTIONS REGARDING COLLEGE ENTRANCE
EXAMINATIONS.

LATIN SCHOOL, ROXBURY, June 26, 1886.

Dear Professor Lane :—

Some months ago, on my saying that I could wish that certain changes might be made in the requirements for admission to Harvard College in Latin, you were good enough to ask me to write you definitely what recommendations I had to make.

In the first place I think it would be a great improvement to make the requirements in Latin similar to those in Greek. That is, to require of candidates for admission the ability to translate at sight passages from designated authors, or works, and to turn into Latin easy passages of connected English based on the prose writers read.

This, I am aware, would seem to be a diminution of the present requirements, since they are substantially this with the requirement that a certain amount in particular authors shall be read and some knowledge gained of antiquities, prosody, etc. But in reality the diminution would be unimportant.

Somewhat greater proficiency might, in a little time, be demanded in Latin composition, so that candidates would have quite as good a knowledge of Latin Grammar as now, and in the matter of collateral information I think only the poorer class of teachers would make any perceptible difference; though I should not be sorry to see questions on antiquities on every history paper. Perhaps less Latin would be read (though not with us), for it is not necessary to read six books of the *Aeneid*, or four books of the Gallic War, to acquire the power of reading Virgil or Cæsar at sight. It depends very much more on the method than on the quantity read.

I have found by actual experience that classes who have read only a little Attic Greek can read average passages in Herodotus at sight

after reading seventy-five pages in that author, and that two books in the Iliad are sufficient to enable candidates to pass with credit (I should judge) the Harvard examination, though I have never sent any boys on so small an amount.

But if less were read it would be read with keener attention to vocabulary, idiom and structure generally, if the examination, modified as I propose, were limited to a test of power to read Latin at sight and to write Latin on the model of what had been read, instead of doing it mechanically by the application of rules.

I believe such a change, giving teachers more freedom, would result in less hurried and superficial work. The necessity of getting over just so much ground, whatever the natural pace of a class, with the knowledge that any passage of the whole range may be pitched upon by the examiner for questions on form and syntax, hampers and harasses teachers to a degree that must be difficult to imagine, for one who has not had personal experience.

It would be interesting to me to know the effect of the change made a few years ago in the Greek requirements, though time enough has not yet elapsed for teachers to have got thoroughly wonted to it. I had anticipated in some measure the changed method in teaching required by the new form of examination, and was rejoiced at the step taken. I believe my own boys go to Harvard better fitted in Greek than formerly. I don't mean that they pass the examinations better, but that their knowledge of Greek is of a sort much better worth having than of old. I feel pretty certain too, that they are better fitted in Greek than in Latin, though they study Greek three years, and Latin six years. Of course they come to the study of Greek older, and after a good deal of study of Latin. I will add too, that we have much better books for teaching Greek than Latin.

Professor White's Lessons cannot be matched at present in Latin, nor Professor Goodwin's Grammar, nor the Anabasis as a first reading book.

But with due allowance, the (to me) more satisfactory results of our course of instruction in Greek are mainly due to the liberty which we enjoy as to quantity of reading, etc., which again allows freedom as to *method*. Let me illustrate my meaning, for I see that the etc., implies in some respects what is of most importance. Formerly we were required to prepare boys in three books of the Iliad. Questions on forms and syntax constituted an important part of the examination. Accordingly neither could be neglected by the teacher on any part without imperiling a boy's chances of passing the examination. It would not do to concentrate attention, for instance, on

either for a length of time, and there was not time, in addition to what must be studied, to dwell on matters not likely to come within the scope of the examination. (I speak, it will be understood, of schools generally, though circumstances made this constraint less felt in a few schools). A definite and intelligent study of the Homeric vocabulary, which is all important, could not be pursued, and boys could not read easy passages, after the study of three books, without constant recourse to the lexicon. Now one can throw his strength upon the first obstacle in the learner's way, the strangeness of the words, until that has been in a measure removed. I have demonstrated repeatedly that the right reading of about two books of the Iliad will enable a boy to read with a good degree of facility.

Instead of three books—the old requirements—we commonly read five.

I am persuaded that such a mitigation of the requirements in Latin would be grateful to many teachers and prove stimulating to all. More interest, freshness, and originality in teaching would result from increased freedom, and some teachers, I am sure, would delight in trying “fresh fields and pastures new.” The reading of the first four books of the Gallic War and the Orations against Catiline, with twenty or thirty successive classes has not proved exhilarating to any classical teacher of my acquaintance.

But there is a plan of examination in Greek and Latin that seems to me much to be preferred to what I have proposed; I believe it is indispensable to sound scholarship that a small portion of one or more authors should be studied *minutely*, and even committed to memory in the original. With an exceptionally good class I have found it possible to have the whole of the first oration against Catiline committed in this way. Now the present scheme of examination in Greek at Harvard does not require this, while that of the Latin examination hardly admits of it to any considerable degree, at least not generally and systematically. I would, therefore, reduce the portions of Latin authors designated and required to the equivalent of a book of Cæsar, one of Virgil, half as much of Ovid, and an oration of Cicero. On these the examinations might be pretty severe, consisting of passages to be translated, a paper of questions, and passages of re-translation into Latin. Then reading at sight and a piece of English to be turned into Latin, perhaps with a short paper of questions on the passages set for reading at sight, should constitute the elective part of the examination. But I should deem it of capital importance that *changes* of books—even of authors—should be made from time to time, with three years' notice.

In this way the monotony of the preparatory work of teachers would be relieved, and they would be obliged to extend their reading, if, as I should hope and expect, there should be some departure in the books required from the authors, or at least, the works specified at present. It is said, I don't know with how much truth, that a very large proportion of teachers fitting boys for college read little, if any, Latin and Greek beyond what they are required to teach. If this is true, the effect upon teachers with the requirements for admission to college remaining for a long period substantially unchanged, must be very limited and gradually diminishing knowledge. The natural consequence of repeating the reading of an author with classes too many times is a diminished interest, routine teaching, blunted perceptions, blurred and dwindling knowledge. Teachers do their best work on about the second or third reading. After that it begins to be irksome to prepare the lesson, and when the practice is discontinued, things begin to grow dim in the memory, to be recalled with less readiness, fulness, and accuracy; hesitation, doubt, and embarrassment take the place of the calm confidence of assured knowledge, and the instruction loses in point, vivacity and effectiveness. Accordingly, when any portion of an author has been required for three or four successive years, it should be dropped and not restored until after an interval of several years.

It seems to me that the elimination of the element of *quantity* from the requirements, or reducing it to a minimum, with the conditions that I have proposed, might enable the colleges to agree in their demands to such an extent as to free preparatory schools from almost all embarrassment. It would at the same time allow a degree of flexibility in the examinations, for each college could determine its own standard of rigor in the examinations, without disturbing the identity in subject and form.

I cannot but hope that I shall be privileged sometime to prepare boys under conditions substantially like what has been outlined in this note; and that I shall not always be compelled to beat the same monotonous round year after year. Does it seem unreasonable to ask that a book of the Odes of Horace be substituted sometimes for an equivalent amount of Virgil, or a number of Cicero's letters for an oration, or the Civil War for the Gallic War? And is there any reason to doubt that a measure of variety would contribute to freshness in teaching? I argued at first, for as much freedom in Latin as we have in Greek. But in Greek we are not permitted to read a speech of Demosthenes, or a Greek play, or a book of Thucydides, or to substitute occasionally the Odyssey for the Iliad. Shall I be pardoned for saying that I have never been able to discover the principle that

has determined some of the immemorial requisites for college ; why, for example, the Oration of Archias should be thought peculiarly suited to the capacity of school boys, while the Essay on Old Age is reserved for a more advanced period of study ; or why the *Iliad* belongs in the preparatory, and the *Odyssey* in the college course ?

W. C. COLLAR.

*THE NEW REQUIREMENTS FOR ADMISSION TO
HARVARD COLLEGE.*

A circular issued in July announces the new plan of entrance examinations in accordance with the resolutions of the Board of Overseers, as given in the *THE ACADEMY* for June. The plan goes into effect in 1887. Young men intending to enter Harvard that year or thereafter have considerable freedom of choice as to the lines of preparatory study which they will pursue. It is now possible to omit entirely either Latin or Greek, while in the ancient language that is offered only so much is required as is involved in "the translation at sight of simple prose." The intending applicant for admission will, however, find no "soft" alternative for the Greek or the Latin which he may be inclined to omit. For the privilege of letting Greek alone he must master severe courses either in mathematics alone or in mathematics and science. Greek and Latin composition is made altogether optional, counting as one of the "advanced studies" not required by the conditions of any combination. The applicant may offer both French and German, or may offer only one of these languages with an advanced study at his option.

Studies that cannot, in any possible combination, be omitted, are *English, History, Mathematics and Physical Science*. It must be noted, however, that under *History* is presented the very novel alternative,— "either (1) Ancient History and Geography ; or (2) History of the United States and of England." Perhaps the modernization of the programme appears nowhere else so conspicuously as in this very important alternative.

Negatively, the chief departures from the old scheme of requirements, as affecting preparatory schools, are, therefore, (1) The possible abandonment of Greek and Latin composition ; (2) The possible abandonment of one ancient language altogether, (which would naturally be Greek) ; (3) The possible abandonment of Ancient History

and Geography. Positively, the schools must take into account (1) A much more severe preparation in Mathematics; (2) New methods in Science; (3) More thorough work in French and German; (4) A course in the History of the United States and of England.

These changes should, it would seem, react favorably, and not oppressively, on the schools. Only large schools, well equipped with teachers and apparatus, can practically meet *all* the possible combinations of the programme. On the other hand, attractive combinations can be adopted that, while satisfying the requirements, will appeal to the common sense of many communities as being reasonable and good, and will relieve the "college class" from the odium of costly trifling with things with which the public welfare has no proper concern.

PHYSICAL TRAINING IN EDUCATION.

PRINCIPAL Z. P. TAYLOR, ROCHESTER, N. Y.

Wendell Phillips, in his lecture on "The Lost Arts," might with propriety have added to his list the Right Method of Promoting Man's Physical Welfare. The progress of mind is seen in the locomotive, the printing press, and the power-loom, which give life and vigor to our productive industries. In our schools we study anatomy, physiology and biology with enthusiasm and success; but what are we doing with this wonderful mechanism of our bodies, in these days of wonderful progress in the culture of humanities?

In the seventy high schools and academies represented at the conference of principals in Syracuse last December, but one school was giving regular, systematic instruction in physical culture. Can it be there is no need of body-building in the education of our youth? Observe carefully the boys and girls as they are dismissed from your schools at the close of the day, and what will you discover? You will see a crowd of pale-faced children with misshapen bodies, and with little promise of a vigorous future. Big heads and slim necks, poor legs and match-like arms, and lanky, half-built bodies predominate. We meet in convention and discuss the best systems of mental and moral education, but fail to recognize the claims of the physical. Look into the schools of Germany and compare with this American picture the sturdy, robust physiques of her boys and girls. I regret that in President Adams's admirable paper on "The Educational System of Germany," which appeared in the March number of *THE ACADEMY*, he did not give greater prominence to physical culture as an essen-

tial element of the German system. The necessity for this training, as a basis for the higher departments of education, is generally acknowledged by the Germans. Such training, however, does not look exclusively to the development of muscle, but to the prompt use of muscular power in obedience to the dictates of mind. Rowing, riding, fencing, wrestling, leaping, ball-playing, in fact all athletic sports as means of physical culture, become of special value, as bringing the powers of the body under the immediate control of the will, and hence have been generally encouraged and practiced by those who have had the direction of German higher education.

The law of Lycurgus provided free training schools for the thorough physical education of both sexes, the results of which were manifest in the well-developed and shapely arm and shoulder, the high chest, the vigorous body, and the firm, erect carriage. The ancient Greeks recognized the truth that with the advance of civilization a regular system of bodily training must take the place of lost opportunities of physical exercise which Nature affords so abundantly to her children in the daily functions of their wild life. By their system of physical culture the Greeks realized that beautiful symmetry of form, which, for us, exists only in the ideal. The same vigorous exercise and training which brought forth womanly physical beauty in ancient days, will develop it now. Our modern civilization exempts many individuals from the necessity of supplying their daily wants by daily physical labor. Wealth removes the objective necessity of physical exercise, but the subjective necessity remains. The modern street car, so convenient to the city dweller, is the source of manifold ills. The majority of our women, in the cities, are physically weak, and not one in fifty can walk two miles within a half hour. "Prevention is better than cure, and far cheaper," said John Locke two hundred years ago. By increasing the action of the circulatory system, athletic sports throw off effete matter and quicken the vital processes till languor and dyspepsia disappear like rust from the busy plowshare. Pliny tells us that Asclepiades used to prescribe a course of gymnastics for every form of bodily ailment. He maintained that health could be preserved, and, if lost, restored, by physical exercise alone, without the use of internal remedies.

I verily believe the time will come in this country, as it has in Germany and Italy, when the State will recognize the need of physical training in her youth, and will introduce a system of general physical culture as it has most successfully a system of special physical training at the Military Academy at West Point. Amherst and Harvard are already leading our American colleges in this idea, but we should begin this training in our primary education, continue it

in our secondary education, and complete it in our superior education.

For two years systematic physical instruction has been given to the pupils of both sexes of the Rochester Free Academy, by a competent instructor, and the results are clearly seen in an improved physical condition, a better carriage, and more symmetrically developed forms. I am satisfied that physical education ought to be made compulsory in every school in this country.

This work must be under the guidance of a teacher, if it is to be made successful, and the teacher must be made to feel that reasonable progress will be expected in this department, as in all other departments of school work. Dr. Sargent's intelligent work in this line at Harvard has given a magnificent impetus to physical training, and he is doing a grand work for the cause of education in sending out well-equipped instructors to enter upon the work of physical training in primary and secondary schools. Three times a week, each pupil in our academy has had the opportunity to exercise for forty-five minutes, with the same regularity that is observed in the rest of his school work. Our classes have ranged in number from forty to seventy, a large number to manage and keep at systematic work. While the instructor is conducting an exercise in free gymnastics with thirty pupils, thirty or forty other pupils may be exercising in squads of five or more with different pieces of apparatus, such as chest weights, parallel bars, single bar, vaulting bar, back machine, side machine, wrist machine, chest bars, chest expanders, and any other pieces of apparatus designed to strengthen any and every part of the body. The Indian club exercise is one of the best for large classes, since it trains the mind as well as the body, and is especially beneficial in developing the fore-arm and giving grace of movement to the body. In this, and in every exercise, we insist on an erect carriage of the head and neck, and frequently explain their value.

We begin these exercises very gradually at first, and increase them in duration and difficulty as the pupils are able to endure them. Indian clubs weighing from one and a half to two and a half pounds each we have found best for girls from fourteen to eighteen years of age—while for boys of corresponding ages clubs weighing from two to four pounds are sufficiently heavy. It is better to prolong the exercise with clubs of the above-mentioned weight, than to exercise too vigorously with a heavier club for a shorter period. A greater variety of movements is practiced with the lighter weight clubs, thus bringing into use a larger number of muscles. Lucy B. Hunt, instructor of gymnastics at Smith College, has written an ad-

mirable little *Hand-Book of Light Gymnastics*, a great help to an instructor in the different series of exercises to be found within its pages. Blaikie in this country, and Maclaren in England, have written excellent works full of suggestions and instruction in special exercises for any given muscles.

I do not wish to be considered an advocate of in-door exercises, when it is possible and practicable to exercise out of doors. But in our large city schools, if exercise is to be taken at all, it must of necessity, in connection with school-life, be conducted in the gymnasium. From the fourth to the sixteenth year children should spend the larger part of every summer in out-door exercises. These years of growth and development lay the foundation of their bodily constitution, and the human system, under favorable circumstances, seems to accumulate a surplus of physical vigor which, in after-life, will become available as an annuity-fund of health and happiness.

[To the majority of our readers will at once occur the conservative query, is all this practical? So we will add that Mr. Taylor's school contains over six hundred pupils, that his corps of teachers is comparatively small, that his other facilities are not extraordinary, and that he lives in a city where every item of educational expense is carefully scanned. The introduction of the system described is due almost solely to his own enthusiasm and efforts, and what he has accomplished in Rochester he could probably have accomplished in any other place. At any rate he has demonstrated that a system of gymnastic instruction is practicable in a large public high-school, and that it can not only exist without impairing the efficiency of other work, but may be a decided help to the efficiency of that work.—ED.]

THE NEED OF HIGHER STANDARDS FOR ENTRANCE TO MEDICAL SCHOOLS.

At the Regents Convocation, this year, Dr. Watson, of Utica, presented the report of the Committee on Medical Education. One year ago the doctor read a paper which set forth in strong terms the necessity of a higher standard in licensing students in medicine. The paper was able and timely. Dr. Watson has made a thorough study of this subject, carrying his investigations through the various medical colleges of this country, and during a recent trip to Europe having made similar inquiries in foreign countries, is able to present a comprehensive comparative view. He finds no cause for dissent from the startling statement of Chancellor Pierson two years ago:

“We regret to say, yet feel bound to say, that no class of professional men entering upon professional life with degrees conferred upon them by authority of law, by institutions duly organized and chartered by law, are so ill-prepared in all fundamental knowledge

and in those preliminary studies which form the basis of educated men, as are those of the medical profession. Yet no profession demands so much careful judgment, such keen sagacity, such wise discretion, such prudence and skill in judgment, such maturity and broad learning as those who practice the various departments of medicine and surgery."

He agrees with President Eliot, of Harvard, that "An American physician or surgeon may be, and often is, a coarse and uncultivated person, devoid of intellectual interests outside of his calling, and quite unable either to speak or write his mother tongue with accuracy. What wonder if, under these circumstances, the degree of doctor of medicine has not heretofore been universally accepted as a passport to refined society?"

This state of things is explained by the fact that there is no standard of qualification for entrance into the profession, except that which the 123 medical colleges in the United States (12 of which are in our own State) may choose to adopt, that in only about sixty per cent of these is any examination whatever required preliminary to the study of medicine, and that in most of the cases where any is required it is of the most elementary kind. The State, in the case of the medical practitioner, waives its own just and proper prerogative of deciding upon the qualifications of those who are to have charge of the lives and health of its citizens, and accepting the degrees conferred by the medical colleges as sufficient guarantees of those qualifications, constitutes them licenses to practice. Having decreed that certain branches of study must be pursued, that three years must be given to their acquisition, and that the candidate must then be examined in those studies before he can receive a degree or license to practice, the State then leaves the fulfillment of these conditions to be determined by those who are pecuniarily interested in granting the candidate his diploma—with all the advantages accruing to its possessor.

Here is a primary and fundamental evil.

"The State certainly should not allow the teachers of a candidate to give him a license to practice. Almost all American medical schools are carried on as private commercial ventures. Each college now establishes a grade of qualifications which is most conducive to its own interests. The schools desire to obtain all the students possible; the student wishes to get all he can with the least expenditure of time and money; hence the tendency is for each of the incorporated medical colleges to underbid the others, in the paucity and laxity of its educational requirements.

"We beg here not to be misunderstood. We are proud to admit that there are some medical schools which do require a high standard

of medical education. They are, however, very few in number, and since the general tendency is as we have stated, the vast majority of the candidates who enter the profession are but poorly equipped to discharge its duties.

"The license to practice medicine is clearly a prerogative of the State. It is a proper function of Government, and is so considered in other countries. So far as the army and navy are concerned, it is so considered here. If the State interposes to protect the lives and health of its soldiers, do not other citizens deserve a like service at its hands?"

The remedy is clearly to be found in rigidly insisting on proper conditions for licensing medical practitioners, and such conditions must prescribe :

1. A fairly liberal preliminary education.
2. Four years of professional study.
3. Examinations and license by an impartial court appointed by the State.

A system similar to the German *Staats Examen*, with such modifications as will adapt it to existing institutions in the country, will inevitably accomplish results anxiously sought by the best medical men, medical societies and all schools worthy of confidence or support. Dr. Watson characterizes the action of such a system as follows :

"First. It can not, if made compulsory, fail to accomplish the object which all educated men so much desire—the elevation of the standard of medical education in this State.

Second. While it confers no special or peculiar privileges upon a class, yet the degree will be an assurance to the public of the qualifications of all who shall attain it, and will, therefore, be a legitimate passport to professional success.

Third. The provisions of such a law will not in any way conflict with the vested rights and privileges of the medical colleges. It will, however, furnish an inducement to them to increase the thoroughness of their instruction, and to advance their standards of graduation, since in the course of time, that institution would attain the highest reputation from which the largest number of graduates should have obtained this degree.

Finally. We believe that no other measure can be devised which would so powerfully tend to the advancement of sound practical knowledge among the future members of the medical profession, while its liberal, impartial and entirely Catholic provisions would leave no reasonable room for objection, and would eventually commend it fully to the good sense of the people of the State."

We have given so much prominence to this subject because it intimately concerns secondary teachers and their work. If the needed changes are made, the influence on high schools and academies will be evident at once, for the bulk of medical students are not college

men or even well-equipped graduates of good secondary schools. Not long ago when the writer spoke in terms of apology for some of his former pupils in a medical college, one of the best known professors in the State replied, "The high school graduates are among the best men we have. It is the men without even an elementary education, who can't spell or write English, of whom we complain." And this was in a college among the most rigid in the State in all its requirements.

In this connection it may not be out of place to state the conditions of admission in the medical schools of our own State. There are twelve incorporated medical colleges in New York, and of these five, including the oldest and largest, make no requirement of preliminary examination. One requires a common school education; another, a certificate from the preceptor of the medical student; another, four of the common branches; another, four of the common branches and algebra; another, spelling, arithmetic, and Latin through the declensions and conjugations.

One point might well have been added by Dr. Watson, the ease with which the requirement regarding the age of licentiates in medicine is evaded. A student seventeen years old may enter a medical college, and at the end of three years finds no difficulty in obtaining a diploma on his statement that he is twenty-one. Opponents of systematic medical study often declare that doctors shorten lives. Is it possible that when we show that the average human life is actually lengthening with every generation, we are depending on statistics so obtained?

THE SUMMER EDUCATIONAL MEETINGS.

MT. DESERT.

The annual meeting of the *American Institute of Instruction* was held July 6-9 at Bar Harbor, Maine. Judged by the now prevalent standard of financial results, the meeting was a very successful one, having been surpassed by but one or two in the history of the Institute. The fame of Mt. Desert as a summer resort, very low rates of travel, the desire to meet old friends and to see the leading educators of New England, and, above all, as was easy to see, the aspiration in the younger teachers to improve the opportunity for acquiring knowledge, brought together an immense throng of excursionists who good-naturedly put up with poor fare and lodging for the sake of having a good time and getting all

possible profit from the meeting. That the general spirit was that of a merry outing rather than that of a grave study of pedagogy was evident in many ways. The audiences at the lectures were continually shifting, trying severely the grit of the president in maintaining order, and, like a school in bad discipline, gave frequent and unmistakable evidences of their impatience when some serious necessary business made them wait a little for the musical entertainment furnished by the Harvard Quartette.

As these summer meetings of teachers have so decidedly taken on the character of pleasure excursions, it would seem to have become inevitable, if any serious conferences on professional matters are to be held, that an organization within the Institute should be formed, with restrictions on membership and with guarantees of earnestness, and that isolated places of meeting should be found, where speakers can be heard and discussion be carried on. The present method may furnish larger audiences, but these audiences are of poorer quality, such as tempt speakers into noisy haranguing for the sake of the applause. Attentive, critical audiences, with time for discussion, would have rendered impossible some silly things declaimed and resolved at Bar Harbor.

The programme, except that it was overful, was generally excellent. Universal and deserved applause was bestowed upon the lecture of President Hyde, of Bowdoin College, on "Overwork in Schools." In preparation of his opinion on this subject, President Hyde had laboriously sought information from many places, applying to the persons who certainly would know, if anybody can ever know, whether pupils are injured by excessive work. Collating various testimony and sifting evidence as to its value, the lecturer concluded, with the assent of his hearers, that the complaint of overwork is all but groundless and by no means points at a defect in the system.

ALBANY.

The Regents' Convocation seemed to us the best meeting we have ever attended at Albany. The massive walls of the Capitol rendered enduring the stifling heat which an indulgent Providence rarely pours out even in Albany during Convocation week.

We have seldom listened to an address which was at the same time so scholarly and suggestive and so popular and well-spoken as that by President Hyde, of Bowdoin, on "The Relation of Higher Education to Religion." No opportunity was given for discussion. Had there been, we are sure there would have been an interchange of criticism and defense which has had no like in the annals of the Convocation. There was blood in the eye of more than one listener.

Has the College a logical place in the American System of Education? was discussed by Prof. Root, of Hamilton, and Prof. Williams, of Cornell. The latter seemed to us much better up to his work than the former, whose written paper and manner of delivery gave little promise of the off-hand burst of eloquence with which he closed the debate. It was by far the best thing in the meeting, and we would go far to hear its like. Hamilton has long been famous for its drill in oratory, but we have never before witnessed so telling an illustration of its practical results.

The discussion of "The Natural Methods" of Teaching Languages was a failure. Dr. Sauveur failed to keep his appointment, and Mr. Sawyer, having prepared himself to meet an antagonist, was little pleased at presenting the negative side of a question that had no affirmative. Even then there might have been some relief had a vigorous opponent stood up to attack Mr. Sawyer's position. As it was, the succeeding speakers all took the same side. Prof. Wells in a pleasant, rambling, good-natured talk, apparently without taking sides, laughed the audience into a good-humored disregard of the pretensions of the whole system. Altogether the Natural Method had a sorry time. More than once the writer, who came prepared to support Mr. Sawyer, was tempted to break his record and say a lot of things he doesn't believe, because it seemed cruel to have a discussion all on one side. His habit of truthfulness, however, prevailed and the words were unspoken.

The paper of Principal C. T. R. Smith, of Lansingburgh, on "Certain desirable changes in the order of the Regents' examinations" was the one which comes closest to the work of secondary teachers. Mr. Smith advocated placing Geometry before Algebra in point of time, and supported his position by a broad view of the subject and cogent argument. We should publish here an outline of his paper did not we hope later to present it to our readers entire.

President McCosh, of Princeton, was in his happiest vein in his evening address on Elective Studies in College. The last morning was devoted to the relation of College and preparatory work without any special tangible result, so far as we know.

During the sessions there was less than usual of that dreary, interminable maundering which it seems impossible entirely to be rid of in this most dignified of American educational gatherings. The most annoying feature of all was the persistence with which gray-haired professors sat in the rear of the room and talked in a hoarse undertone, utterly discomfiting all in the neighborhood who wished to follow the proceedings. There is something peculiarly incongruous in

finding such conduct in one who year after year has had opportunity to speak from the rostrum, and who has always received a patient hearing.

NIAGARA FALLS.

The feeling is coming to be more and more general every year that the New York State Association is not a fair exponent of the teaching power of the State. The best teachers are never the readiest to show their faces on platforms or rush into print. The man who really succeeds in the highest sense, does so because he has ideals so high that his best efforts fall far short of his own wish, and that forces him to look modestly on his attainments. We are never vain of our ideals, we are always pleased with our approaches toward them. So that if our action is equal to our aspiration we are always ready to proclaim our success, although we are really furnishing our own condemnation as idealists. It is no answer to say that the good teacher *should* make himself felt. The good teachers will not force themselves on the public notice, whatever they ought to do. The president elect, Mr. Griffith, is a man who thoroughly commands the respect of the teaching fraternity in the State. We do not know how largely it may be in his power to inaugurate a change that shall be lasting, but we confess to a feeling of hopefulness and shall look with interest on his work.

The most important paper presented at Niagara Falls was the address by Prof. Payne, of Ann Arbor. Prof. Payne seems to be one of the coming men in pedagogics, and his work is giving him a reputation and standing among thoughtful teachers as one of the most philosophic and helpful of our writers on education. Judge Draper, the new State Superintendent of Public Instruction, made a favorable impression, an impression that will be strengthened by his utterances elsewhere if he manifests the same spirit, energy and appreciation of his duties which he has betrayed in all that we have read of him. To the best of our knowledge, and we speak with no unpleasant personal recollections, New York never has had a Superintendent of Public Instruction worthy of the interests committed to his care or the body of teachers of which he is the nominal head. Superintendent Draper has opportunity to make a record that shall show a marked contrast to his predecessors, and that shall go far to make it impossible to appoint an unworthy successor. Col. Parker was the most entertaining speaker of the meeting, and one of the most helpful. Every year his power increases and his improvement in speaking is remarkable. It is a delight to listen to him. No man makes so many statements from which we entirely

dissent or caricatures more mercilessly some of the best work, but he is always vigorous, aggressive and stimulating.

The other papers of special interest to teachers were The German Gymnasium, by Principal Kneeland, of Mt. Morris; The Study of Civics in Public Schools, by Principal Cook, of the Potsdam Normal School, and The Cultivation of the Memory, by Principal Ferrin, of Keeseville.

Chautauqua sent to the Association this year as last, an urgent invitation for the next meeting of the Association. Other suitable places were not lacking. The committee reported in favor of Chautauqua, and the Association voted to go to Elizabethtown! It cannot for a moment be considered that this is the choice of the teachers of New York State. We look at this thing solely from the view-point of a teacher. We live near the center of the State and are not largely concerned about distances. We have no wish to build up any particular summer resort or advance the interests of any railroad. The prime thing is to find the place best suited to the exact needs of the meeting. First of all it should offer ample accommodations in the way of board and lodging. Teachers are as able to endure discomfort as any class of society. If there were need they would go to martyrdom with smiling faces. Convince them of the need and they will ignore all annoyances. But with the knowledge in their minds that there are plenty of delightful and commodious places, they are necessarily restive and impatient at being made to serve the private ends of individuals or corporations. Secondly, the place of meeting should furnish assembly rooms ample for all needs free of expense to the Association. Thirdly, it should combine natural attractions in the way of scenery, salubrity, means of recreation and absence of minor annoyances. Fourthly, it should be both easy of access and secluded enough to be quiet, free from the distractions incident to great centres, and without the means largely to divert visitors from the legitimate work of the session. Fifthly, it should heartily invite the Association.

Chautauqua seems to us on the whole to combine these points better than any other place in the State. But one reason can be urged against it. It is in the extreme corner of the State, and that could hardly have weighed much with those who voted for Elizabethtown.

TOPEKA.

The meeting of the National Educational Association, at Topeka, in point of numbers was inferior to no similar meeting ever held in this country. It is not the province of THE ACADEMY to enter into a

detailed account of the work done ; even if it were we should shrink from entering into competition with the *Journal of Education*, whose reports in quality and fulness leave little to be desired. The attendance was enormous, even unwieldy. For any one person to see much of the work going on was impossible. Not so many quiet chats were enjoyed as at smaller gatherings, because the crowd prevented one from finding his friends. The writer and one of his teachers who was there never met once during the whole meeting, in spite of every effort. Topeka, moreover, was hardly a desirable place for such a meeting. Its hotel accommodations are very limited. It has no suburbs, no adjacent towns or cities to which an overflow may properly run. It lies in a region where excessive and protracted droughts are not rare. More hospitable entertainment than was given the N. E. A. by the citizens could hardly be conceived. All houses and hearts were open, and all kindness was lavished on the "stranger within the gates," but it was beyond their power to limit the heat or control the rainfall. A month has gone by, the memory of it all—except the Windsor hotel—is very pleasant, the discords are faintly remembered, the harmonies still remain, but through all runs one theme with occasional variations and modulations, dust, *heat*, HOSPITALITY !!!

The convention can hardly be said to have presented much value in the line of permanent additions to educational literature. The paper of Supt. E. E. White, of Cincinnati, on Moral Training, was the most important of the session, and was eminently timely. The dominant question in public schools to-day is this of Morals. Mr. White finds the true basis in forming habits of right doing and right thinking. Teaching the intellect or stirring the emotions fails to secure the end desired, it can be done only by the formation of habits of virtue. All crimes are prepared for and made possible by previous habits either of action or of thought. There has always seemed to us a wonderful lesson in morals in the opening scenes of Macbeth where the witches' prophecy falls harmless on Banquo simply because his habit of thought is right, but reveals all the hungry watching for evil that must have marked Macbeth's thoughts for years. Even religion can work towards virtue only through the formation of habits.

Second in interest and importance was the report of Dr. S. H. Peabody, of Illinois, on Industrial Education. The report was fair and judicial in its tone. There is a world of wild nonsense talked on this subject, the absurdity of which appears in the fact mentioned by Supt. White that only three per cent of our population are living by branches included in so-called industrial education. The whole

question is apparently forced to the front by interested parties largely for direct profit to themselves.

Dr. Mowry, of *Education*, in presenting "The College Curriculum," clearly found an audience in sympathy with him in his conservative views. We hope the paper will appear in *Education*.

Thursday afternoon some forty high school and academy teachers met in a parlor at the Windsor hotel to consider the feasibility of a department of secondary education. The department of higher education had been crowded, and the time had been too brief for the number anxious to discuss the papers. The importance of the preparatory school is every day increasing, and the feeling of common aims and common difficulties among secondary teachers is constantly unifying these teachers and bringing them nearer a professional status. In token of this mark the organization of the Associated Academic Principals of New York, the Michigan School-masters' Club, the Illinois high school teachers' association, and kindred organizations in other states, all of recent formation. The sentiment of the meeting being unanimously favorable, a petition was drawn up and a committee appointed consisting of Principals Geo. A. Bacon, Syracuse, N. Y., James H. Baker, Denver, Col., Henry L. Boltwood, Evanston, Ill., and L. C. Hull, Detroit, Mich. The petition was successful and on Friday morning the department was duly established by the council. Details of its organization and work will appear in *THE ACADEMY* later.

RECENT CHANGES IN NEW YORK.

New York teachers at the opening of the new year find in their environment no little change. There is a new principal at the high school in Albany, Rochester, Auburn, Poughkeepsie, Norwich and Iliou, in the Buffalo Normal School and the Albany Academy. No such alteration among our associates has happened during the fifteen years that we have taught in the State.

Dr. Bradley, by personal characteristics and official position has long been prominent among us. The principal of the largest school supervised by the Regents, connected with the school from its origin, directing its organization and equipment, with the exception of Mr. Evans, of Lockport, and Mr. Sawyer, of Utica, he was, we believe, the senior city principal in the State. Especially in the convocation his absence will be felt. Our cordial congratulations and our best wishes are heartily tendered.

Mr. Taylor leaves the Rochester Free Academy under circumstances of peculiar hardship. When a man like Dr. Bradley leaves at his own wish for better pay and a wider field, we feel a pride in our State and its record. But when a man of unusual scholarship and ability, of large experience and eminent success, of unceasing diligence and unimpeached character, is dropped because he had used influence to prevent liquor selling on Sunday, one stands aghast not at the hardship to the individual, but at the prospect of the schools. It is no uncommon thing to charge many of the evils of the present day to the pernicious neglects of the public schools, to complain that in our courses of study, religion and morals are crowded out. But if a man of godly life, who commands the respect of all his associates by his manhood and his technical ability in his special work, can be dismissed from his school because his influence is plainly and definitely for temperance and morality, the enemies of popular education can see their triumph near at hand.

The feeling of sympathy for the individual is entirely hidden by our shame at the humiliation of a great city.

Mr. Taylor last winter moved in conjunction with a few others to close "the Casino," a low-lived place of amusement, on Sundays. The manager was indicted but has never been prosecuted. Back of the "Casino Company limited," was "The Duffy Whiskey Co.," and the "J. H. Miller Brewing Co." These men brought their influence to bear upon that portion of the Board of Education interested directly or indirectly in the liquor traffic, and Mr. Taylor was dropped by a close vote, though unanimously recommended for re-appointment by the committee. A wholesale liquor dealer made, and a saloon keeper (both Republicans) seconded, the motion to remove Mr. Taylor. The latter had no warning, having just received and declined an offer of the position of assistant superintendent, (salary \$2,500,) at Cleveland, where he had taught for eight years.

At Auburn, early in June, Mr. Cutting, received a letter from the Chairman of the Teachers' Committee, asking for his resignation. The letter offered assurance of assistance in securing for him an appointment elsewhere. Very properly Mr. Cutting refused to put himself in a false light before his pupils and friends, or to be a party to fraud by tacitly accepting recommendations from a board that had found it necessary to discharge him. On the publication of the correspondence it was found that neither pupils, parents nor the Auburn public generally saw reason for Mr. Cutting's closing his connection with the school. His hold on all was much stronger than either he or his friends had anticipated. The board, however, had the right to dismiss him and he has been dismissed.

We are not of those who believe that a teacher should be the judge of his fitness for a position. We do not hold even that the decision should be left to the pupils, the parents, the newspapers or the general public. It is the sole prerogative of the board of education, it is their function and they should exercise it with full sense of the responsibility and importance of the interests committed to their charge. We do not, however, forget that during the past fourteen years the Auburn Board of Education has found it necessary to secure the removal of every principal who has been selected to take charge of their high school. Some of these men have been eminently successful in similar work under conditions apparently not more favorable than those at Auburn. In any case there must have been a serious lack of conscientiousness or discrimination either in the choice or the dismissal of these men.

CORRESPONDENCE.

To the Editor of The Academy:—

Your cheerful statistics showing the growth of the study of Greek in this country should be made known to those melancholy Germans who are bewailing the decadence of Greek studies among their countrymen. The late pope, unhappy at the loss of his temporal dominions, and chagrined at the diminished revenues paid him by the Italians, who knew him best, was said to contemplate finding a refuge for the holy See in America. Who knows but the German humanists may yet have to cast about for a new home for classical studies; and why should not these United States, in which the study of Greek is extending more rapidly than the population increases, become the humanistic hope of the world?

The latest jeremiad that the German despondency over the classical question has produced is an anonymous tract entitled "Classicism or Materialism," "*von einem Unbefangenen*." This writer without prepossessions, who does not however conceal his dejection, tries to analyze the causes of the decline of classical learning in Germany, and to announce the measures necessary to prevent further progress in this direction. The fact of this decline he assumes we well know. Is it not, however, possible that the statistics, even of his own country, would reassure his mind, and prove the general impression to be a groundless panic? Perhaps, after all, a short method with the anti-Grecians would be to proclaim a reward for him who should point out who let the ass into the camp. Such would certainly have

to be our conclusion if still further statistics concerning Greek studies, which, it is to be hoped, THE ACADEMY will collect, should confirm the impression produced by those already published. As the latter related to the *extent* of Greek study, or the number of youth pursuing it, the next statistics should have reference to the *power* of such study to engender enthusiasm and to create lasting impressions.

The questions to elicit information on this point would be somewhat like the following: What percentage of classically educated men continue to find their intellectual diversion in Greek literature? Of those who do still enjoy Greek literature, how many read it in the Greek? Of the demand for Greek books in translation, what proportion comes from graduates? What percentage of the demand made upon public libraries for reading matter is for books in Greek, and of the Greek books called for how many are wanted by others than teachers or students? How many of the Greek books sold are other than school books? What demand do the publishers feel for clean and elegant editions of the classics, without notes and vocabularies, such as a mature reader is apt to insist on having for his favorite authors? When pupils of Latin schools are allowed to choose their book-prizes, how many choose Latin or Greek ones? Do journals of philosophy find the masters of arts generally eager to come forward with subscriptions?

Should encouraging answers to such questions as these reinforce your June statistics, Mr. Editor, all this turmoil about the classical question would be shown to be a false alarm, and the only query remaining would be,—how in the world did it ever happen.

S. T.

If a reward is offered in good faith for pointing out who let the ass into the camp, we propose to compete. We may not be able to fix the blame on a single individual, but we can easily show how it all came about. When an express train passes a slow-moving ox-team on the western plains, the latter seems to be going backwards, so quickly is it distanced. A careful comparison with fixed objects, however, will always determine whether it is moving forward or not. So when other studies are advancing in popularity ten or twenty times as fast as the population increases, Greek seems to be going backward. But the swift-moving train may not be the truest point of observation. Occasionally one has to step out of the march of modern progress to learn whether some feature in the passing landscape is stationary or moving. The editor of THE ACADEMY stepped out last spring, and in so doing he learned not only what he sought to

know, but he realized, as he could not otherwise have done, how rapidly the great column is moving. Of course he may have been mistaken. The ground on which he stood may not have been *terra firma* at all, but some half-cooled lava mass that is itself drifting slowly backwards and so gives apparent motion to objects absolutely stationary. He simply reported that the Greek was moving forward as compared with the mass.

If we apply the questions proposed to the Greek, must we not in all fairness apply them elsewhere? What percentage of students in ordinary scientific and mathematical courses continue to find their intellectual diversion in the study of mathematics, or in physics? Of the demand for scientific or mathematical books what proportion comes from graduates? What percentage of the demand made on public libraries for reading matter is for books on physics or mathematics, outside of those who in some way get their living by such reading? How many such books sold are other than school books? What demand do the publishers feel for scientific or mathematical treatises of a high order among those who studied these branches in school or college? Following the implied argument we must simply drop from our courses every branch now studied. German can keep its footing no better than Greek, and even English Literature and Civil Government, the studies which in thirty years have made the greatest relative progress, judged by this standard, are failures.

It is moreover hardly to the point to instance German discontent as an argument. The German boy half through the gymnasium has spent more time on the classics than the American college graduate. As the dominant force in educational courses the ancient languages have had their day. The inevitable will happen whether we like it or not and whether we shut our eyes or not. Relatively Greek has lost and is rapidly losing ground. Absolutely we do not think that it has or that it will. Within forty years the methods of land transportation have entirely changed. We have no figures by which to estimate the advance of steam locomotion as compared with the use of horses. But it is only a relative gain. There has been no absolute loss. There are more horses than forty years ago and they do more work. Their absolute efficiency has increased, their relative importance has sadly dwindled.

Greek is not destined to drop out of the life or fade from the memory of the educational world. The throngs that crowd other temples may make the worshippers at the classic shrine seem a mere handful. The woods of Delphi cannot compete with the marts of Corinth, and the busy traders between the two seas may think the mountain shrine deserted because the world throngs their streets. But

the oaks still shelter the faithful, though the forms may be hidden from careless eyes. The true worshippers are not dead or departed, and the momentary attraction that calls away the half-hearted and those who follow for fashion's sake but strengthens the sacred cause. [ED.]

NOTES.

THE ACADEMY is mailed to all subscribers promptly on the first of the month. Subscribers should inform us if it is not received within two days of the time when it ordinarily reaches them.

Owing to the scattering of principals during vacation, *Interchange* is omitted in this number. The topic for October will be that announced for September. Later there will be a symposium on the "Natural Method."

As to changes contemplated in the curriculum of *Harrow*, the details of the scheme, says the *Journal of Education*, (London), are not yet settled, but it will follow the main outlines already indicated, that is to say, the abolition of Greek in the lower quarter of the school, a large liberty of choice of subjects in the upper third of the school, and special arrangements for army pupils.

The American Association for the Advancement of Science met at Buffalo, August 18-25. Over one hundred papers were offered in the various sections. One of the most able, perhaps the one most interesting to the general public, was read by Mr. Edward Atkinson, on "The Relative Weakness and Strength of Nations." Mr. Atkinson, it is interesting to know, was the predecessor of Gray, the defaulter, as treasurer of the Lewiston Mills, but his free trade views did not please the company and he resigned. Mr. Gray was sound on the doctrine of protection, but subsequent events indicate that he had his weak points, and they seem to an outsider not less disastrous than free trade doctrines.

We quote the following from a letter to the *Journal of Education* (London) for August :

"There is a school in London where at least *one* assistant mistress has found out that she can exist on three nights' sleep in the week. By this means she can just accomplish her quota of corrections.

"There is another school where a certain mistress must either forfeit her Sunday's single service, or stay in her study *every* night till midnight. She never reads a new book.

"In a third London school, an assistant mistress is lucky enough to have two brothers living at home, and during examination weeks they settle themselves to help her in correcting from 7 to 12 P. M. 'If they had not done this, I don't think I could have lived through it so long,' is their sister's comment.

"Where is the advantage of superior education for women, if they do not learn from it how to wisely arrange their work, how to secure for themselves the pleasures of reading, art and rational society, and some shelter from the fierce competition which is destroying the life, health and happiness of the women best fitted to use and appreciate leisure?"

As indicating how wide a prominence education is attaining in the current literature of the country we cannot forbear to note the articles that have appeared this year in *The Andover Review*. This, it must be remembered, is a "religious and theological monthly." In the volume closing with the June number, we find "The Group System of College Studies in the Johns Hopkins University," by President Gilman; "The Harvard New Education," by Prof. G. H. Howison; "Individualism in Education," by Dr. Denison; "The Elective System of the University of Virginia," by Prof. Garnett; "National Aid to Popular Education," by Prof. E. J. James, and "Education New and Old," by Prof. Ladd. We know of no educational paper that has published so strong and timely a series of articles on subjects of deep interest to teachers as this theological review.

A meeting of the Associated Academic Principals was held, in accordance with previous announcement, in the Senate Chamber, July 6th. It was solely a business meeting, it being thought unwise to attempt the discussion of school work. Principal Cheney, chairman of the Committee on increase of the Literature Fund, presented a report setting forth that both branches of the Legislature had passed a bill appropriating \$60,000, but the Governor had withheld his approval, thus defeating the measure. The thanks of the Association was voted to the Committee, and very justly, too, for we do not remember ever knowing a Committee more worthy of praise for conscientious, intelligent and persistent work. Principal Bacon, at the request of the President, made a statement regarding the success of THE ACADEMY, which was highly gratifying, far outstripping the most sanguine hopes of its projectors.

The following amendment to the constitution was adopted: Ex-principals who have been in service five years or more are eligible to membership in the Association.

It has been the well-established custom in nearly all classical and semi-classical schools to put Cæsar's Commentaries into the hands

of pupils after they have finished some first year book in Latin. The reasons for this are that Cæsar is on the whole the easiest classical author, and that his Latinity is the best to base composition work upon. To escape the difficulties of the indirect discourse of the First Book, the books are usually read in the order of II, III, I, IV.

The chief objections to this course are that it is in itself uninteresting, and that the pupils lose that enjoyment which comes from the sense of the rapid mastery of a subject. When sentence after sentence has to be worked out with infinite labor and constant use of the lexicon, the average pupil finds little pleasure in the result. Recognizing this fact and the lack of appreciation of pure Latinity in young pupils, such schools as the Phillips Exeter Academy, the Roxbury Latin School, and many others have chosen the *Viri Romæ*, or some book like Bennett's "Easy Latin Stories for Beginners," or some parts of Justin or Nepos, to be read before Cæsar. Whoever, therefore, adopts a course like this may be sure that he is in the line of the present tendency. It will be well, however, for him to go to some other source for his composition work.

ANNOUNCEMENTS OF NEW BOOKS.

D. C. Heath & Co., Boston, Mass., announce a Monograph on *Modern Petrography*. An account of the Application of the Microscope to the Study of Geology, by GEORGE HUNTINGTON WILLIAMS, of the Johns Hopkins University.

A *Bibliography of Pedagogical Literature*, carefully selected and annotated by Dr. G. Stanley Hall, Professor of Psychology and Pedagogics, Johns Hopkins University.

An *Elementary Course in Practical Zoölogy*, by B. P. Colton, A. M.

A new and enlarged edition of *Common Minerals and Rocks*, by W. O. CROSBY, Assistant Professor of Mineralogy and Lithology, Mass. Institute of Technology.

Henry Holt & Co., 29 West 23rd St., New York, announce

A Practical French Grammar. By William D. Whitney, Professor in Yale College, and author of English, German, and Sanskrit Grammars, etc., etc. Ready Sept. 1.

General Biology. By William T. Sedgwick, Ph. D., Professor of Biology in the Massachusetts Institute of Technology, and Edmund B. Wilson, Ph. D., Professor of Biology in Bryn Mawr College. Ready Sept. 20.

A Practical Rhetoric—English Composition and Revision. By J. Scott Clark, Instructor in Syracuse University. 12mo. pp. \$1.50.

BOOKS RECEIVED.*

Elementary Algebra. By Charles Smith, M. A., Fellow and Tutor of Sidney Sussex College, Cambridge. London: Macmillan & Co. 1886.

Pedagogical Biography No. II. John Amos Comenius. By R. H. Quick. C. W. Bardeen, publisher, Syracuse, N. Y. 1886.

Northend's Memory Selections. Advanced Series. Price, 25 cents. Primary and intermediate series at same price. C. W. Bardeen, publisher, Syracuse, N. Y.

Advanced Sheets of Sheldon's Elementary Arithmetic, with oral and written exercises. Sheldon & Company. New York and Chicago. 1886.

Lectures in the Training Schools for Kindergartners, by Elizabeth P. Peabody. Boston: D. C. Heath & Co. 1886.

Sheldon's Supplementary Reading: Third Book. Sheldon & Company. New York and Chicago.

A History of the American People. By Arthur Gilman, M. A. With Illustrations. The Interstate Publishing Company. Boston: 30 Franklin St.

Pedagogical Biography No. I. Schools of the Jesuits, Ascham, Montaigne, Raticl, Milton. By R. H. Quick. Syracuse, N. Y.: C. W. Bardeen, publisher. 1886.

How We Are Governed: An explanation of the Constitution and Government of the United States. A Book for Young People. By Anna Laurens Dawes. Chicago: The Interstate Publishing Company. Boston: 30 Franklin St.

Essays on Educational Reformers. By Robert Hebert Quick, M. A., Trinity College, Cambridge, Late Second Master in the Surrey County School, and Formerly Curate of St. Mary's, Whitechapel. Cincinnati: Robert Clarke & Co.

Cinna ou la Clémence D'Auguste. Tragédie 1639. Edited with notes, glossary, etc., by Gustave Masson, B. A., 'officier d'academie' Univ. Gallic. Assistant Master and Librarian, Harrow School. Oxford: at the Clarendon Press. 1886.

Studies in General History. By Mary D. Sheldon, formerly Professor of History in Wellesley College and Teacher of History in Oswego Normal School, N. Y. Teachers' Manual. Boston: D. C. Heath & Co.

Trigonometry for Beginners as far as the solution of triangles. By the Rev. J. B. Lock, M. A., Senior Fellow, Assistant Tutor and Lecturer in Mathematics of Gonville and Caius College; formerly Master at Eton. London: Macmillan & Co. 1886.

The Principles and Practice of Common School Education. By James Currie, Principal of the Church of Scotland Training College, Edinburgh; author of "The Principles and Practice of Early and Infant School Education," "Elements of Musical Analysis," "First Musical Grammar," etc. Cincinnati: Robert Clarke & Co. 1884.

*Any of these books may be more fully noticed hereafter.

Practical Recitations. Selections for Literary Exercises Appropriate for Reception Days, Holidays, Poet's Birthdays, etc., including Concert and Musical Recitations, and Dialogues from Popular Authors, especially arranged for this work. By Caroline E. LeRow, Instructor in Elocution, Central School, Brooklyn, and formerly Instructor in Vassar and Smith Colleges. New York: Clark & Maynard.

Old School Days. By Amanda B. Harris. Twenty-four Illustrations by W. Parker Bodfish. Chicago: The Interstate Publishing Company. Boston: 30 Franklin St.

This little book is valuable as preserving vivid glimpses of a school life familiar to many as a memory, but no longer existing. To its truthfulness thousands of teachers now living can readily bear witness.

Numbers Applied. A complete Arithmetic for intermediate and grammar schools. By Andrew J. Rickoff. New York: D. Appleton & Co. 1886.

A hasty examination gives us an entirely favorable opinion of this book. The special feature seems to be the quantity of material offered for practice in arithmetic as an art and the clearness with which it is illustrated and developed as a science.

Preparatory Latin and Greek Texts Required for Admission to American Colleges. Cæsar, Cicero, Ovid, Virgil, Xenophon, Homer. New York: Henry Holt & Co.

This book attempts to give, and does give, in compact and convenient form all the Latin and Greek texts required for entrance to any American college. The print is good and not too fine, the size convenient and the whole appearance attractive. There is no vocabulary and the notes are limited to the Greek portion.

Classical Atlas in twenty-three colored maps with complete index. Ginn & Company: Boston, New York and Chicago.

The absolute necessity of map-study to any intelligent comprehension of literature and history fully justifies the publication of all possible helps in this direction. In the present edition the plates are for the most part identical with the edition of 1882. A few additions have been made, notably the military roads in Italy, and routes have been more distinctly marked. The index has been entirely re-made, and obviously improved.

Die Karavane. By Wilhelm Hauff, with Notes and Vocabulary by Herman Hager, Ph. D. (Lips.) London: Macmillan & Co. 1885. Price, 65 cents.

Hauff is an author little read in America, either in school or out. His German is idiomatic, but not difficult, and his stories are full of interest. *Die Karavane* is made up of six short stories told by fellow-travelers in the intervals of rest during a desert journey. No moral is attempted. They are all lively with incident, and cannot fail to make reading German attractive even to the dullest. The notes are good and helpful, and a grammatical introduction, with its cute

devices for supplementing the vocabulary, seems to us likely to be of material assistance to the learner. The book contains 176 pages of German.

International Educational Series II. A History of Education. By F. N. V. Painter, A. M., Professor of Modern Languages and Literature in Roanoke College. New York: D. Appleton & Co. 1886.

In attempting to give a comprehensive history of education in all nations, Prof. Painter frankly acknowledges his indebtedness to the great French and German scholars who have already covered the vast field, especially to Karl Schmidt, confessedly the ablest historian of pedagogy. No teacher can afford to pass over this book in his reading, and no one can read it without a conspicuous widening of sympathy with, and an increased comprehension of, educational progress. The most careless reader will find his attention riveted by paragraphs that epitomize whole periods of time and wide phases of thought. The introduction by Dr. W. T. Harris is peculiarly felicitous.

Great Lives: A Course of History in Biographies. By J. M. Mombert, D. D. First Series. Leach, Shewell & Sanborn. Boston and New York.

This book contains brief accounts of thirty-two great men, beginning with Hercules and ending with Grant. The plan of teaching History by means of Biography is an excellent one with young scholars. The names included here are all such as no boy can afford to be ignorant of. The limits of the work, however, are such as to force the author to compress his matter too much and to leave out too much that is important and would greatly add to the interest of the book. We should prefer two volumes the size of the present one with half the number of characters in each. That would give opportunity for greater fullness of detail, and allow a much more vivid impression of each of the great men in the book.

Of the selection of names, especially in Modern History, we do not see how the author could well have done better.

Selections for Written Reproduction, designed as an aid to composition writing and language study. By Edward R. Shaw, Principal of the Yonkers High School. New York: D. Appleton & Co. 1886.

Outside of moral training the most important and practical work we can do is to teach pupils how to write. There is no department of work so poorly done as composition work and none more dreaded as drudgery. Any book that lightens the labor or helps the results is welcome. Mr. Shaw's little book is much needed and will meet a wide demand. Its practical value must be determined by use. Its plan is right, it seems conscientiously carried out, there is good material given, and it is so arranged that if it seems to any one not

graded to his wants it can be easily adapted to the preferences of the individual teacher. It will tide over many difficulties and relieve many hard pressed teachers.

Byron. Childe Harold. Edited with Introduction and Notes by H. F. Tozer, M. A. Oxford: at the Clarendon Press. 1885. New York: Macmillan & Co.

Like all Macmillan's books, this one is attractive in form. The life of the poet follows a golden mean between fulsome praise and indiscriminate condemnation. His literary characteristics are well brought out, and his influence in literature is explained. The Essay on Style will not only repay careful study, but may be used as a valuable suggestion in the study of other authors. The notes are, in the main, excellent. The editor has abundant resources of scholarship, and wide reading, but he seems to us not unfrequently to annotate where the meaning is perfectly plain. We commend the book to all literature teachers who read Byron with their classes.

Modern German Reader. A Graduated Collection of Prose and Poetry from modern German writers, edited by C. A. Buchheim, Phil. Doc. Part II., with English notes and index. Oxford: at the Clarendon Press. 1885. New York: Macmillan & Co. Price, 60 cents.

We have always placed a high estimate on Buchheim's work in editing German classics. Many incline to think him too elaborate for class-room use, but if modern languages are ever made to yield the same results claimed for the ancient classics, it must be through the medium of careful and minute study, and for such study carefully edited text-books are a necessity. Their office is, however, not to be confounded with that of books designed for rapid reading, and suited to draw the beginner on by their vivid interest till he unconsciously acquires a vocabulary. The present book will introduce the learner to a number of the less famous writers with whom it is well for him to be not entirely unacquainted. The selections are quite short, with the exception of a *Lustspiel* in one act by Benedix, which occupies twenty-one pages.

Class-book of Geology, by Archibald Geikie, LL. D., F. R. S. Illustrated with woodcuts. London: Macmillan & Co. 1886.

Dr. Geikie has brought to the task of preparing a text-book of geology a thorough equipment of knowledge, a clear and pleasant style, and large experience in teaching. These have been supplemented by all the resources of the book maker's art. The result deserves and will command high praise. In many respects it is the best book on the subject that we have ever read. American schools may feel the need of more detail in the description of certain features of special interest near home; in some parts, too, especially

the latter portions, there seems to be an unnecessary array of technical knowledge, but on the whole we think the book not second to any published. The work in part second is specially well done. The diagrams and illustrations throughout are excellent.

Astronomy by Observation, an elementary text-book for high schools and academies by Eliza A. Bowen. New York: D. Appleton & Co. 1886.

In this book the author seems to have hit upon a practical solution of the main difficulties in teaching astronomy. Under the method prescribed the interest of the student will be stimulated, the most delightful features of the study are brought forward at the outset, and a middle way is opened between the exclusive consideration of dry details in a treatise and the impractical attempt to work entirely by observation. In carrying out the plan the publishers have brought to the assistance of the author all the appliances of their art, and spared no expense in making the book helpful by means of pictures, maps and diagrams. The quarto form adopted has enabled them to do this to the greatest possible advantage.

Histoire d'un Écolier Hanovrien, par Andrée Laurie. Paris, Hetzel. 1886.

This would be a perfectly suitable book to read in the upper French classes of a high school. It is charmingly written and is intensely interesting. The improbable features of the story are easily isolated from that which has historic value. Historically trustworthy are the pictures of life in a German gymnasium and university, the representation of the feeling prevailing among citizens of the minor German states towards Prussia, and the accounts of the minute governmental supervision of the instruction given in German schools. Once begun, the book will not be laid down till it is finished. Neither teacher nor pupil will resist the impulse to follow the fates of the hero and the villain to the end.

Hand Book of Plant Dissection. By J. C. Arthur, M. Sc., Charles R. Barnes, M. A., and John M. Coulter, Ph. D., Editors of the *Botanical Gazette*. New York: Henry Holt & Co.

This book is uniform in appearance with the excellent series of scientific books published by the same firm. It attempts by thorough and careful work on a few plants to teach the principal features of plant anatomy and at the same time to beget in the learner habits of systematic and critical observation with which alone studies in Natural History can be successfully followed. The authors are not ashamed to stoop to the minutest details. There is an explicitness and definiteness about their directions which cannot fail to encourage the student, and at the same time foster the same pains-taking accuracy on his part. To the best of our knowledge no such book has heretofore appeared, and the thorough and scientific method of the present.

work makes it doubly valuable in satisfying a long felt want. The appliances required for proper prosecution of the work are fortunately at hand in all our best schools.

Cæsar's Gallic War with an introduction, notes and vocabulary, by Francis W. Kelsey, M. A., Lake Forest University. Boston: John Allyn, publisher. 1886.

We think this book makes good the promise of the publisher that it should be the best school edition of Cæsar ever issued. Its appearance is attractive, the typographical work clear and handsome, the binding strong and flexible. It contains better maps and plans than other school editions, and has six full page colored plates. The introduction gives a large amount of matter well condensed and of real value, together with a life of Cæsar and a discussion of his work as a general, as a politician and as a man of letters. There is a certain inadequacy in the presentation of the character of Cæsar, not arising so much, perhaps, from a lack of appreciation on the part of the editor, as from the difficulty of conveying an adequate idea of the great man's life and work. This is especially felt in his treatment of Cæsar as a politician.

In the text *i* is everywhere substituted for *j*. The notes are fuller than in most editions, but they do not make the mistake of giving too much direct help. The vocabulary is unpretentious, apparently endeavoring to give only such philological assistance as is likely to be appreciated by young students. Other features of the book are a list of helps to the study of Cæsar, which may be of real service to teachers, and a table of *idioms* and *phrases*, the value of which must be determined by actual test in the class-room.

Die pädagogische Carrière der Gegenwart. Critische Plaudereien von einem Wohlbekannten. Leipzig. 1885.

Under the guise of instruction to a young teacher seeking advice as to how he may secure professional advancement, the anonymous author of this little book shows up the shady side of the German educational system. Evidently there is as much *politics* concerned in pedagogic getting on in Germany as in our own country. Men are numerous and the places are few, and promotions are not determined always by lofty impersonal and impartial considerations. German officials are human, and the art of winning their favor is the same old trick of time-serving that has furnished themes to the satirists from Juvenal to the German malcontents of to-day.

The freedom with which such trenchant criticisms of German officialism are now made is conclusive evidence that the existing order of things is to prove itself not altogether stable. Human nature will not be repressed even under a Prussian system. What in America is universally known to exist and is kept down by a public sentiment always ready to detect and recognize its bad influence in educational administration exists equally in Germany, where it is far more pernicious, since any evil activity, that avoids the light, thrives better in a vast official system than in a looser organization which is pervaded by a general purpose to make the good prevail.

Selections from Latin Authors for Sight-Reading. By E. T. Tomlinson, Head Master of Rutgers College Grammar School. Boston: Ginn & Co. 1886.

Improved methods of classical study have brought sight-reading into prominence, and Mr. Tomlinson's book is an attempt to fur-

nish formal assistance to teachers in this work. He gives 136 pages of extracts at some length and with notes, from Cæsar, the New Testament, Quintus Curtius, Cicero and Virgil. The remaining 100 pages are made up of short passages from the same authors, with bits of Livy, Ovid, Horace, Tacitus and others. As to the notes there is room for infinite differences of opinion; they seem to us in the main judicious.

The author well says, "Exhilaration is a necessary quality for successful sight reading in class," but in some of the selections he does not seem to have kept it closely in view. More very easy Latin should have been given at the beginning. The first selection does not strike us as the easiest in the book, as one would naturally have expected. Sight-reading should begin at the outset of Latin study, and exhilaration and the delight that comes from apparent success are more important in the early stages of reading than the cultivation of pure Latinity. The latter can be cared for more particularly in Latin composition and in the critical preparation of assigned lessons.

To secure the best results teachers must retain the books of the class in their own hands giving them out only for the exercise in reading. This will keep all the matter fresh and make it a real exercise in what the English call "unseen translation." Any teacher who faithfully devotes fifteen minutes a day to this work will surprise himself at the end of the year. We commend to special notice the "Directions for Sight-reading" following the preface.

Barnes' Elementary Geography by James Monteith. New York and Chicago: A. S. Barnes & Co.

Barnes' Complete Geography. By James Monteith. New York and Chicago: A. S. Barnes & Co.

These two books, together with the two histories of the United States recently published by the same firm, mark the highest point ever attained in school books, so far as type, paper, press-work and illustrations are concerned, and it is hardly going too far to say that they are not surpassed in these respects even by the best books on art. Much as a teacher may admire artistic work, however, in considering a school book he should endeavor not to allow mere beauty to bias his judgment as to its teaching value, for after all that is the final test.

The plan of the books is excellent. In the smaller the language seems not always perfectly natural. Though clear and distinct, it is often formal. The engravings are not only exquisite specimens of art, but every one helps the mind to valuable knowledge. The maps are admirable, both the detail and the outline, and these latter cannot fail to be of great service in the important matter of map-drawing.

The larger book presents the usual matter taken up in the advanced study of the subject. The style is clear and compact, and the arrangement systematic. The larger transcontinental views, extending in some cases across both pages, give the pupil ideas not to be obtained in any other way. The maps will be criticised by some as too crowded. We should be inclined to make the same objection did we not remember the character of the maps in the

smaller book and assume that the outlines and general features would be learned there. Innumerable devices for conveying all sorts of information are introduced, rendering the work especially valuable as a book of reference, though perhaps not adding materially to its value as a working text-book.

One can hardly repress a feeling of satisfaction or even pride in the enterprise of a house that can and will command such resources, in the native artists that produce such results, and in the wealth and prosperity which can make this enormous outlay remunerative, for the work has not been undertaken without the definite knowledge that there was money in it.

Die Gewöhnung und ihre Wichtigkeit für die Erziehung. Eine psychologisch-pädagogische Untersuchung von Dr. Paul Radestock. Berlin, 1884.

Habit and its importance in education. An essay in pedagogical psychology. Translated from the German of Dr. Paul Radestock, by F. A. Caspari, with an introduction by G. Stanley Hall, Ph. D. Boston: D. C. Heath & Co. 1886.

From the point of view of modern psycho-physics Dr. Radestock's essay presents in a most impressive manner the far-reaching importance of habit in education. A work so stimulating, so full of grave admonition and practical suggestion, so clearly fortifying the common-places of the moralists with scientific exposition, we have not met with in the recent literature of pedagogy. It expounds and illustrates the very fundamentals of the science of education, and yields hints for direct application in the art of teaching. Adequately expanded in its various topics, it would come near to covering the whole ground of pedagogic science.

This praise we bestow only on the original work of Dr. Radestock. The translation takes treasonable liberties with the arrangement of the original and is besides marked throughout by indolence and incompetence to a degree rarely equalled even in this age of hurried work. Dr. Radestock's book consists of an essay of forty pages, written with due regard to unity and consistency, and a much larger body of notes, mostly quotations, thrown together at the end of the book. These notes the translator incorporates with the text of the essay, mingling them indistinguishably with matter to which they are incidental, and producing a result so broken and inconsecutive that the book, which should be, like the original, interesting, is made unreadable and even repulsive at the very outset. The author's chapters are ignored by the translator, who divides at new points, for unseen reasons. Carelessness in placing quotation marks often renders it uncertain whether the author or some one of his numerous quoted authorities is speaking.

Only occasionally is the translator's work a sufficient rendering of the original. We filled the margins with our marks, noting important errors, but can cite only one or two here. By translating *geht über in Erregungsarbeit*, "appears in arousing actions," the translator shows his ignorance of modern physical science; as he does again in rendering *Obertöne* "upper tones;" and again in rendering *Kraftwirkung*, "powerful action;" and again in rendering *Erhaltung der Kraft*, "preservation of forces;" and again in translating the title of Dr. Kussmaul's *Die Störungen der Sprache*, "corruption of languages"! *Humanismus* and *Philanthropinismus* appear as "humanita-

rianism" and "philanthropism." "*Die logische Denkkraft und Energie wird dadurch zur Thätigkeit herausgefordert und angefeuert*" appears thus: "the logical thinking-power and energy are hereby challenged to activity and fired on"! The clause *von denen man bei nicht ver- wöhnten Kindern Gebrauch machen kann* is translated, "which can be used with good result by children not thus spoiled." But we might cite scores of such instances of poor work. We give only one more. The author quotes Shakespeare's

"If all the year were playing holidays,
To sport would be as tedious as to work."

in German. Our translator, instead of turning to his Henry IV., indolently renders the German before him with this result: "If the entire year consisted of holy play-days, celebrations would be as noxious as labor." The same slovenly course is pursued with the author's quotations from Bain and Spencer, who are thus made to appear in most strange and unknown guise.

Very refreshing it is to turn from the hard task of reading this book in its English form to the vigorous and beautiful introduction by Dr. Hall. A book from this most prominent psychologist, showing, in language intelligible to the mass of intelligent teachers, how the recent science of psycho-physics has contributed, and may yet contribute, to the science of pedagogy, would find eager and general welcome.

THE ACADEMY

Is offered with the following periodicals at reduced rates, if paid in advance:

Harper's Monthly.....	\$4.25	regular price, \$4.00
Atlantic Monthly.....	4.25	" " 4.00
Century.....	4.50	" " 4.00
St. Nicholas.....	3.50	" " 3.00
Scientific American.....	3.70	" " 3.20
Independent.....	3.75	" " 3.00
Christian Union.....	3.50	" " 3.00
N. E. Journal of Education.....	2.75	" " 2.50
Popular Science Monthly.....	5.00	" " 5.00
North American Review.....	5.00	" " 5.00
Political Science Quarterly.....	3.00	" " 3.00
The Forum.....	5.00	" " 5.00
The Citizen.....	2.00	" " 1.50
Education.....	3.25	" " 3.00
Educational Gazette.....	1.50	" " 1.00

To subscribers of THE ACADEMY we offer the following books, specially valuable to teachers, at an enormous discount, postpaid. The editions are in each case the best published, beautifully printed on good paper and well bound.

Lectures on the Science and Art of Education, by Joseph Payne. The only complete edition published. 8mo., 414 pages. Price \$1.50; to subscribers, 90 cents.

The Action of Examinations, by Latham. Price \$1.50; to subscribers, 90 cents.

The Ancient City, by De Coulanges. Price \$2.00; to subscribers, \$1.10.

The Works of Virgil in English Prose, by Conington. Price \$2.00; to subscribers, \$1.15.

John Amos Comenius, by S. S. Laurie. Price \$1.00; to subscribers, 60 cents.

Day Dreams of a School-master, by D'Arcy Thompson. Price \$1.50; to subscribers, 75 cents.

THE ACADEMY:

A JOURNAL OF SECONDARY EDUCATION.

DEVOTED TO THE INTERESTS OF HIGH SCHOOLS, ACADEMIES AND ACADEMIC
DEPARTMENTS.

GEORGE A. BACON, . . . MANAGING EDITOR.

VOL. I.

OCTOBER, 1886.

NO. 7.

*THE RELATION OF HIGHER EDUCATION TO RELIGION.**

BY PRESIDENT WILLIAM DE W. HYDE, BOWDOIN COLLEGE.

The higher education can only vindicate its lofty claims by showing its vital connection with the every day concerns of average men and women. Let it be suspected of exclusiveness, and it will be distrusted. Let it be judged impractical, unrelated to the real interests of the people, and popular support both of money and of men will be withheld.

Last year, in a most thorough and conclusive manner, the material and social benefits which higher education brings to the community were here set forth. To-night I shall endeavor to indicate the points of contact between the higher education and those spiritual aspirations which it is the function of religion to satisfy.

This is a subject on which two diametrically opposite views have been held. In a general way, allowing for individual exceptions on either side, it may be said that the Latin church has regarded the relation as external and arbitrary; a matter of judicious expediency if not a tolerated evil. Tertullian, the Father who contended for the materiality of both the soul itself, and its future environment, refused to allow a Christian to be a teacher in secular schools where Greek and Latin mythology were taught; and only on the plea of necessity did he permit the children of Christians to acquire "*saecularia studia*

* An Address delivered before the Regents' Convocation at Albany, July 7, 1886.

sine quibus divina esse non possunt." Cyprian, the Father whose political philosophy is indicated in his remark that "kingdoms do not rise to supremacy through merit, but *are varied by chance*," likewise in the references he deigns to make to "pagan philosophy," is strenuous to separate it as far as possible from Christian faith. Jerome, trained himself at Rome in classic literature, conceded the reading of authors like Terence and Vergil to the young as a necessity, but regarded a love for them cherished and indulged in later life as criminal.

Augustine also laments the delight he found in youthful study of the Latin poets, and though he, like Jerome, defends the employment of such learning as an efficient aid to the defense and exposition of Christian truth, yet he defends it by the analogy of the Israelites who took the gold and raiment of the Egyptians, leaving behind the idols and superstitions, and at length falls back on the practical utility of such studies as helps in the technical work of the preacher. Gregory the Great threw the weight of his powerful influence against secular studies, forbidding the study of classic literature to his bishops, and declaring instruction in such studies to be unworthy of even a pious layman.

In the eighth century Charles the Great undertook, with the aid of Alcuin, the restoration of learning. Here, however, the motive put forth for such study is still external, appealing to the better understanding of Scripture which general culture would bring about. "For," says the capitulary, "since the Scriptures contain images, tropes, and similar figures it is impossible to doubt that the reader will arrive far more readily at the spiritual sense according as he is the better instructed in learning."

It is needless that I here recount the long and familiar story of the later antagonism of the Latin church to secular learning: the jealousy of all philosophy and all science which could not be subjected to a servile conformity to her own preconceptions. From first to last wherever Latin Christianity, with its notion of a remote external, purely transcendent Deity has prevailed, there the relation between higher education and religion has been either admitted as a necessity, to be jealously watched, and guarded, and held in check; or else it has been openly opposed and rejected.

To be sure throughout all this time there have been individual minds rising above this external conception of God, and this arbitrary connection between education and religion. Indeed, nearly all our endowments for higher education, have been the gifts of such broad-minded, far-sighted, deep-souled religious men. Religious men from first to last, even within the Latin church, and often under the influence of the Latin conception of a purely transcendent Deity

have done the most and the best work in both classic and scientific studies. For science, after all, as Dr. Hedge has well said, is the offspring of the church. Born in monkish cells, the foundling of religious houses, vowed to Christ and the Saints, nursed by cowed friars, cradled among crucifixes and breviaries, with men like Raymond Lully and Roger Bacon and Albert the Great for its sponsors, the child was baptized with the Holy Ghost. And yet, while this is true; while as I hope we shall see science could not have had other than a religious birth and baptism; it is equally true that there has been throughout the entire history of Latin Christianity, and the reign of the Latin conception of a purely transcendent God, an antagonism latent or expressed, between learning and religion. They have been suffered to associate as co-laborers. Religion has deigned to acknowledge learning as her handmaid. She has not, she could not consistently with the conceptions dominating the Latin church own her as a sister.

Fortunately, however, the Latin with its Deistic conception of a transcendent God, remote in time, distant in space, aloof from Nature and alienated from humanity, is not the only type of Christian faith. From the first centuries, there has been shining with pure and steady light, a warmer, brighter, more natural, more human type of faith. And like the rays of some far off star which has been shining for uncounted ages, yet through the immensity of heaven's impenetrable deeps, has but just succeeded in reaching us with its bright welcome, so through the long centuries the Greek doctrine of the Immanence of God has been serenely sending forth its healing beams, until at length they seem to be winning a response from the receptive hearts of the present generation.

According to this view God is not merely a vague, spatial, semi-material omnipresence, as many are tempted to regard him when first they seek deliverance from the notion of the far-off anthropomorphic architect. His omnipresence is rational, spiritual. Wherever there is being there is thought, and that thought is manifested God. Without such thought, or idea, or law, or reason, or word, or wisdom, no clod of earth maintains its form, no wave of ocean lifts its crest, no moving air sweeps through the forest, no brook winds its way from the mountain to the sea. Without this indwelling reason no germ bursts its integuments, no branch puts forth its bud, no flower unfolds its petals, no pollen begets in the ovule the offspring which another spring shall summon forth to life and beauty. Especially within the mind of man no true thought rises to consciousness, no right desire is cherished, no pure affection is entertained, save in so far as the finite mind, and will, and heart thereby participate in the absolute

thought, and will, and law of God. Without denying the reality of the finite, or the freedom of the individual will, and thus falling into Pantheism, this view still maintains that the reality of the finite is not in separation but rather in union with the Infinite; and that the human will attains its true freedom only in perfect conformity to the perfect, all embracing will of God.

One would say at first sight that such a view of God must naturally lead to a view of the relation of education and religion altogether more sympathetic and vital than that which has been handed down to us through the traditions of the Latin church. And such we find to be the case.

Clement, of Alexandria, the great representative of the Greek faith in an indwelling God, insists at every point upon the vital and essential unity of religion and learning. Says Professor Allen: "Because Deity indwelt in humanity and the human reason partook by its very nature of that which was divine, Clement was forced to see in the highest products of the reason the fruits of a divine revelation. He makes no distinction between natural and revealed religion, between what man discovers and what God reveals. The higher activities of human thought and reflection are only the process by which the revelation of truth is conveyed to man." Clement admits, as we all must, that "a man can be a believer without learning," but he also asserts that "it is impossible for a man without learning to comprehend the things that are declared in the faith." He contends vigorously against "those who object, what use is there in knowing the causes of the manner of the sun's motion, for example, and the rest of the heavenly bodies, or in having studied the theorems of geometry or logic and each of the other branches of study on the ground that these are of no service in the discharge of duties, and the Hellenic philosophy is human wisdom." He tells them that "they stumble with reference to the highest things," and exclaims, "How irrational to regard philosophy as inferior to architecture and ship building!" The intelligent believer he urges "to take from each branch of study its contribution to the truth. Prosecuting then the proportions of harmony in music and in arithmetic, noticing the increasing and the decreasing of numbers, and their relations to one another, and how the most of things fall under some proportion of numbers; studying geometry, which is abstract essence, he perceives a continuous distance and an immutable essence which is different from these bodies; and by astronomy again raised from the earth in his mind he is elevated along with heaven and will revolve with its revolution, studying ever divine things and their harmony with each other, from which Abraham starting ascended to the knowledge of

him who created them." Again he says, "Let us then receive knowledge not desiring its results, but embracing itself for the sake of knowing."

Such is the intimate relation between religion and higher education as it lay in the mind of the Greek Father. Every indication points to a revival in our day of the Greek type of Christian faith. The immanence of God, the incarnation, the sonship of man to God; the indwelling spirit, these are the central doctrines of the faith of intelligent believers in our day as among the Greek Fathers in the first centuries. As the confluence of all systems then at Alexandria, so the growth of criticism and science is presenting to the choice of men to-day as the only alternative, either a faith at once profoundly spiritual and broadly rational, or else no faith at all. Without faith men never have lived and never will. It needs no prophet's vision to foretell in the near future a mighty re-awakening of that type of religious faith which views God through his word as everywhere revealed, and man by virtue of his rational nature a partaker in the divine reason. In every great movement it behoves the leaders of education to be awake. Especially does it devolve upon us to be alive to this religious movement, since with the restoration of this type of faith, there comes a nobler and higher conception of what the mission of education is.

By this historical discussion having shown that if what I am about to say seems in conflict with one conception of religion, there yet is another with which it is fully in accord, I may now venture to announce my thesis which is this: The Relation of Higher Education to Religion is that of Contents to Form. Uneducated religion is empty and unsubstantial. Irreligious education is chaotic and inconsistent.

Education and religion are by no means identical. It is not true that as Goethe said, "He that has art and science has also religion." Yet though not identical they are practically inseparable. Though in thought they are distinguishable, they are in fact indivisible.

The claim of such indissoluble unity of interests often supposed to be divided must of necessity meet antagonism from both extremes. The self-sufficient savant will scorn the insinuation that his vast mass of accumulated information is, taken by itself, only a

"Monstrum horrendum, informe, ingens cui lumen ademptum."

The narrow religionist will haughtily repudiate the idea that when divorced from knowledge his rites, his ceremonies, his ecclesiasticisms "are shadows, not substantial things." Each will feel that the indispensableness of the other is a detraction from its own importance. Yet in truth it is only in and through the other that each

gains its proper dignity and grandeur. If I have occasion to show that divided they fall, it is only that I make more manifest the complementary truth that united they stand.

Religion without education is empty. It is a form devoid of contents. This statement is not intended to deny the fact that an uneducated man may be as devout a worshipper and servant of God as the most learned. The individual man, though himself untrained in the learned culture of his day, yet unconsciously shares in the universal enlightenment of the community in which he moves. From the general conceptions of astronomy, natural history, ethics, and economics, it is impossible to exclude even the uncultivated member of a civilized community and a Christian church. Accordingly the exception of individual men who are Christians, and at the same time uncultured, is an exception more apparent than real. For throughout every civilized, Protestant, Christian community, except such abnormal conditions as slavery, or misrule, or industrial oppression carry in their wake, in every normal Protestant Christian community, where papers are read and preaching is heard, there is shed abroad a general enlightenment in which even the humblest individual of necessity partakes.

Granting then this apparent exception in the case of individuals, we may without fear of misconception affirm that in the community at large religion without education is a formal, empty, unreal affair, and that the real religion of a nation is bound up with the higher education.

In order to recognize this truth, we must have in mind very clear and definite conceptions of what religion is. If religion is vague awe in the view of the unknowable, as the agnostic declares, obviously higher education has nothing to do it. Between such a conception of religion and higher education the only relation possible is that between the fabled pot of gold at the end of the rainbow, and the credulous child who pursues it. The farther we extend our knowledge the farther off do we thereby push the limits of the unknowable. On such a theory the only difference between learning and ignorance in its relation to religion is that learning stares at vacancy from a higher eminence, and looks at nothing through a bigger telescope. Truth and God are related only as antitheses.

Pietism, or the religion of mere feeling, likewise has no relation to education. If feeling is everything, then no doubt the less nervous energy one is called upon to bestow in intellectual lines, the more he will have to give out in response to emotional appeals, and the more he can contribute to the edification of a company who measure the

intensity of their devotion by loudness of exhortation, depth of groans, frequency of ejaculation and abundance of sensuous excitation.

Passing by agnosticism on the one side and pietism on the other, as equally irrational and consequently altogether out of relation to knowledge and education, we may resolve all genuine religion into two elements, worship and service. The problem of the relation of religion to higher education resolves itself into these two inquiries: What does higher education contribute to the worship of God? What does higher education contribute to the service of God?

Let us consider first the dependence of worship on higher education. Worship must have something definite to lay hold on. "No man hath seen God at any time." No thought of man can represent him in the depth and fulness of his Infinite Being. Yet on the other hand worship can not go out into empty space. You can not direct it toward blank vacuity. Worship must have a medium. Praise and thanksgiving, adoration and homage must have something present to the mind. What shall that something be? This is the problem of problems in religion. To it there are two and only two answers. Either worship may seize on some external object, some arbitrary rite, some artificial ceremony and make that the contents with which to fill out the form of worship. This is idolatry: the substitution of some creation of God or some fiction of man for the uncreated spirit and truth of God. Or else worship must lay hold on the creative thought, and reason, and wisdom, and word of God, as he has revealed himself in nature, in history, in literature, and in the mind of man. This is true worship, and obviously it is higher education in its various departments of science, history, literature and metaphysics, which alone can furnish to the common consciousness the true conceptions of the expression God has made of himself in creation and Providence. Truth forms the contents of which worship is the religious form. The Hebrew religion demonstrates its divine character and is assured of a lasting place in the world's devotion by the fact that her prophets and psalmists did thus identify their religion with the learned culture of their day, and worshipped God through the medium of his historic acts and his creative will, as revealed in the history and science of their day. It was the works of God that they seized on as the medium of communion and praise. "One generation shall laud *thy works* to another and shall declare thy mighty acts." "Wonderful are thy works and that my soul knoweth right well."

In the 136th Psalm, that grand pæan of Hebrew praise, the motive is found throughout in those expressions of God which it is the province of history and science to trace. Thanks is to be rendered

"To him that by understanding made the heavens.

"To him that spread forth the earth above the waters.

"To him that made great lights.

"To him that smote Egypt in their first-born.

"And brought out Israel from among them.

"With a strong hand and a stretched out arm."

In the 148th Psalm likewise, sun and moon, and stars of light, dragons and all deeps, fire and hail, snow and vapor, stormy wind fulfilling his word, mountains and all hills, beautiful trees and all cedars, beasts and all cattle, creeping things and flying fowl, kings of the earth and all peoples, princes and all judges of the earth, old men and children, both young men and maidens, are recognized as the medium through which the worship of the creature ascends to the Creator. The very objects with which the higher education deals were the means by which the devout Israelite in the days of Israel's religious vigor expressed their worship. Is the natural world or the providence of God less sacred to-day than then? If they praised God as manifested in the history of their nation and the birds and beasts, the rocks and mountains, the trees and flowers of Palestine, shall not we, to whom the history and science of the whole world is open, recognize in the wider knowledge and science of our day the means of a fuller, grander worship and communion than was possible to them? Not by servile repetition merely of what was the highest attainable by them; but by doing with reverence and fidelity in our day what they did so grandly in theirs; by seeing and adoring God in every truth and beauty that nature discloses to the science of our day; by recognizing and revering him in every upward and onward movement of the moral order of states and nations shall we be as devout in our Christianity as they were in their Judaism. The idea of a distinction between sacred and secular science after countless defeats and overthrows, is pretty well exploded. We may reasonably hope that with the futile onslaught that has been made on Darwin and the doctrine of evolution, this disgraceful chapter of human misconception may be closed; and that hereafter, while differences of opinion will continue to prevail, and controversies will continue to wax fierce, yet the banners of secular and sacred science will cease to wave over the contending hosts. May we not anticipate, too, as not far distant, the day when the barriers between secular and sacred history shall be swept away by the rising tide of a profounder religious spirit which sees that all the life of men and nations is sacred; and even special intervention in the history of one people, marks their sanctity as different in degree but not in kind from that of every just and God-fearing nation that has been or yet shall be?

Then when science shall unfold the principles which underlie the beauties and utilities of nature ; when history shall spread out before us the laws by which societies and states attain greatness and well-being ; when humanity shall praise the living author of these principles and laws, then and not till then shall we take up the torch of true spiritual worship where the great souls of Israel and early Christianity left it, and bear it forward for the guidance and illumination of the ages yet to come.

Only by the union of higher education with religion, furnishing from their respective spheres, contents and form, can the worship of our day have that prophetic originality, which is ever the stamp of vital union of the living God with living men.

The second essential element in religion is service. How shall we serve God? Here again two courses are presented to our choice : Either we may rest back upon some outward ceremony or elaborate ritual and call that in itself "Divine Service"; in which case again we are practicing a more or less refined idolatry ; or else we must serve God by practical endeavors to make the world in which we live more beautiful and bright ; its vegetable life more perfect and useful ; its animal inhabitants more docile and gladsome, and above all man himself more happy, more generous, more pure, more wise, more Godlike.

Such and so practical was the service required by the law of ancient Israel. "Thou shalt not seethe a kid in its mother's milk." "Thou shalt not muzzle the ox when he treadeth out the corn." "Cursed be he that removeth his neighbor's landmark." "Cursed be he that wresteth the judgment of the stranger, fatherless and widow." The wages of a hired servant shall not abide with thee all night till morning." "And when ye reap the harvest of your land, thou shalt not wholly reap the corners of the field." Scarcely less explicit are the prophets in their denunciation of those that "oppress the hireling in his wages, the widow and the fatherless, and that turn aside the stranger from his right, and that fear not the Lord." The service of God according to the Jewish faith, involved precise and definite conceptions as to husbandry, agriculture, domestic and public economy, civil rights, judicial procedure, the relation of land, capital and labor, and the foreign policy of the nation. Now it is needless to say that the only way in which the true and the right in these relations at the present time can be determined is by the prosecution of such studies as physiology, botany, chemistry, ethics, political economy, sociology and constitutional history ; the very studies with which higher education deals. Neither the old nor the new Testament defines the line between legitimate specula-

tion in which a real future need is anticipated and provided for, and illegitimate speculation in which an artificial need is created in order that one man may profit by what he causes another to lose. But a thorough study of economic conditions will show a man where the truth and righteousness, that is where the will of God about that matter, lies. The Hebrew law will not point out in explicit terms the way in which the godly man should vote on the tariff in 1886. But political economy will. No passage in either Testament will tell you what to say to the beggar at your door. But the study of social conditions will. No man will venture to assert that Christianity is intended to include less than Judaism. On the contrary the distinctive glory of Christianity lies in this, that it is the form of an infinite content. It is adapted to include every phase of individual, family, social, industrial, commercial and political life. Yet it gives few precise rules. It gives the form in its own comprehensive law of love to God and man. It gives the pattern in the life of Jesus Christ. It gives the motive in his sacrifice. It gives the flowing outline in its delineation of the Christian graces, faith, meekness, compassion, hope, love. But the work of filling in these outlines and reproducing in individual lives the grand pattern is left to human intelligence. And higher education on its practical side, as it deals with ethics, economics, sociology, political history and constitutional law sets forth the contents of which Christianity is the form. Unless I know something of the laws of physiology and hygiene I can not in the highest, fullest sense present my body a living sacrifice, acceptable to God. How many men and women there are to-day of intensest devotion to God, so far as the formal act of consecration goes, who yet from ignorance or neglect of hygienic laws, are offering him the service of bodies which in their actual concrete material condition are anything but acceptable either to God or men. Their service is complete in form, but the contents are inadequate. How many a worthy layman is sincerely offering the undivided service of his soul to God; and yet the outcome of whose business, highly profitable to himself, is dooming some fellow creatures, brothers and sisters of his, to hardship and privation and want. The general diffusion of sound teaching on ethics and economics, would help him to save himself from this shameful contradiction. Here again the influences of higher education are needed to furnish adequate contents to the already perfect form of religious service. It is not just to assume that every man who taxes the consumers, rich and poor throughout the country, an extra penny for their kitchen fire and evening lamp in order that he may pile up the dollars that monopoly and a limitation of the output pour

into his treasury ; it is not just to say that these men are all knaves. Some of them doubtless are. But many more as they receive their profits and give away their tithes, verily think they are doing God's service. They are ignorant ; and under the circumstances they are doubtless forgiven by God, and excusable in the sight of men. But it is the mission of higher education to enlighten them and make them without excuse. And in a community where the sound teaching of ethics and political economy should be generally diffused, the man who should by any device, whether by round-about methods in railroad construction or artificial fluctuations in stocks, or adulteration of groceries, or selling of intoxicating drink, get gains dependent upon corresponding loss and injury to others, would have to take his proper place, his "*ἰδιον τοπον*" as was said of Judas, by the side of thieves and malefactors and public nuisances. Shed abroad from your colleges and universities the searching light of strict ethics and sound political economy, and your deacons who draw ten per cent dividends from underpaid labor, your church members who are in any wise responsible for the evils of intemperance, your Sunday-school superintendents who water their stock or adulterate their goods, will be compelled to define themselves more precisely as to their relation to the rival masters, God and Mammon. Let sanitary laws be diffused ; let the responsibility of landlords be understood ; let the right relation of the capitalist to the laborer be clearly defined ; and the question about the prominent members of society will cease to be the superficial questions, how much is he worth ? what is his income ? and in place of them will be put the infinitely more important questions, how did he get his money ? how much was human misery or human welfare increased by his acquisition of it ? how is he fulfilling the responsibilities which the administration of such wealth involves ? and the moment these latter questions are substituted for the former, aristocracy, you perceive, will begin to rest on a sounder basis ; the man will be reckoned worth most who does the most good ; and the popular estimate, and the Christian standard of manhood will begin to coincide. In other words Christian consecration will have contents adequate to its form. And without the diffusion of such higher education, such contents can not be furnished, and consequently such much to be desired coincidence and consistency can not be attained.

Without further illustration I trust it is evident that for service as for worship an intellectual content in the form of truth, principle and law, is quite as essential as the emotional or volitional form of reverence and consecration. Without such contents religion is empty, and unreal, superstitious in its devotions, and inconsistent

in its practice. If this be true then higher education stands to religion in the relation of inside to outside, of body to figure ; of contents to form. The relation between them is that relation of organic unity of opposite elements which is the principle of life and being everywhere. Though distinguishable, yet the one can not exist without the other. The cause of higher education is also the cause of true religion ; the true professor is likewise a prophet of God, and they who give of their money and their service to the furtherance of sound learning are no less truly the priests and prophets of God, than those who directly support and administer the institutions of religion. We are told in the inspired word of God, that wisdom, the truth, the word, was with God from the beginning, and without the word nothing was made that was made. So may religion whereby man is related to God ; and higher education whereby man is related to the wisdom and rational expression of God in nature and history be evermore united in holy bonds, and bring forth their beauteous offspring of peace and justice and love and blessedness.

Our oldest university started with the simple motto *veritas*. It may have been bigotry that some years later sought to supplant the ancient motto by "*Christo et ecclesiae*." It certainly was bigotry of the narrowest, shallowest type, that within the past few years has been clamoring for the removal of that second motto. Let us rejoice that neither religious narrowness nor hollow intellectualism has triumphed. The old university enters on the second quarter of her first millenium next November with a new seal :—*Veritas* upon the open books at the center, and *Christo et ecclesiae* around the circumference encircling all. May this new seal of our oldest university be the emblem of the true union of Higher Education and Religion in every institution of every State throughout this land forevermore.

According to *Nature*, Japan has thirty-seven periodicals devoted to education. Seven of these are medical, with a monthly circulation of 13,514. Nine treat of sanitary matters, two of pharmacy. Twenty-nine of the thirty-seven are what might be termed popular scientific journals, and have an aggregate circulation of 70,000.

SHOULD ALGEBRA PRECEDE GEOMETRY?

BY PRINCIPAL C. T. R. SMITH, LANSINGBURGH, N. Y.

It is, of course, impossible to form a course of study for secondary schools which shall satisfactorily meet the views of every teacher. There are many kinds of schools, the needs and circumstances of students vary widely, the views of teachers and their favorite branches differ largely. It is the prevalent custom in high schools and academies to make the study of algebra precede that of geometry. Would it not be better to take up these two studies in a different order?

To see the reasons for the change proposed, let us consider briefly the uses of mathematical studies, and the principles which should regulate their sequence. Perhaps their most important use is to give the power, or to form the habit, of continuous voluntary attention. As to the importance of this power there can be but one opinion, and we cannot better express that opinion than by quoting the words of the venerable Mark Hopkins in a recent address delivered on the fiftieth anniversary of his appointment as president of Williams College. In defining the expression a "disciplined mind" he said, "By this I mean a power of concentrating the attention for a long time on one subject. I do not mean the power to hold the attention thus on some one subject to which the person may have a bent, and to which the tendency may become so strong as to mount the man on a hobby or to become an insanity, but I mean the power of so commanding the mind as to be able to give concentrated attention to any subject when it is required. Only thus can there be profound thought, only thus can all the relations of the subject, within and without, be seen." Now this power of concentrated thought which Dr. Hopkins describes as the essential of mental discipline can be obtained by few, if any, other studies so thoroughly as by the study of mathematics.

Another effect of such study is to exercise and strengthen the faculties employed in demonstration, and make the mind quick in detecting fallacies. In other lines of investigation the mind is largely, if not mainly, occupied in establishing the premises of its reasoning—the facts on which reasoning is based. But mathematical demonstration has nothing to do with anything that actually exists. It begins with a hypothesis and proceeds to a conclusion that is true

without a doubt. Hence many metaphysicians have decried the study of mathematics as a discipline for the mind, claiming, in the words of Sir William Hamilton, that "By it we are disqualified for observation, either external or internal, for abstraction and generalization, for common reasoning, nay, disposed to the alternative of blind credulity or of irrational scepticism."

No one would claim for the studies in question that they discipline the ordinary powers of observation and perception by the senses, but there is a kind of observing power which they do cultivate—the power which perceives relations among ideas and thoughts. The importance of exercising and strengthening this power, I think no one will be disposed to deny. Certainly habits of close thinking and of looking out for fallacies are engendered by mathematical studies, and these habits are among the most valuable that school training can give.

A third advantage is that well conducted recitations in mathematics give to the student habits of precise expression, to a greater degree than recitations in most other studies. The ideas which form the subject-matter of these recitations are usually capable of precise definition and for each there is a particular expression—a word for each idea and an idea for each word. If the teacher is careful to point out the absurdities of mathematical expression into which the student is led, by loose statements and bad diction, and to tolerate no ambiguities in recitation, valuable training in the clear expression of thought must accrue.

Again, good comes from the studies under consideration, in that they tend to develop the creative imagination—the inventive faculty. Let me illustrate, for perhaps some would smile at the idea of training the imagination—a faculty supposed to find play in art and poetry,—by the study of arithmetic, for instance.

Once I heard a lesson given by a careful teacher in this way. The class had finished the study of square measure, and the lesson was intended to introduce to them cubic measure. The teacher showed a block from a box of geometrical forms. "Of what shape is this block?" said he. "It is a cube," was the answer. "Now I want you to imagine a larger cube. Imagine it as long as this foot-rule, and as wide, and as thick." He turned the rule vertically and horizontally in the air to make it represent three edges of the cube in succession, as he spoke. "Can any one tell what you might call such a cube?" After a moment, as no one responded, the teacher said, "I think you might name it from its length." "A foot-cube" one boy suggested. "Well, we will call it a foot-cube. Now I want to find out how many such foot-cubes could be packed into this room. We

will begin by imagining one foot-cube down there in the corner on the floor, and another placed beside it, and another till we have a row as long as the room. How many foot-cubes would there be in the row? How can we find out? Each would extend one foot along the base-board, you see." "Measure the base-board," said several pupils at once. "Well," said the teacher, producing a measuring-tape, "John and Henry may measure it, and Alfred and George may measure the opposite base-board with this yard stick, and we will see how they agree." The wall was found to be forty-eight feet, five inches in length, and it was decided that there would be forty-eight and five twelfths foot-cubes in the row. Then the teacher asked the class to imagine another row of foot-cubes besides the first, and others still, till the floor was imagined to be covered with foot-cubes and the number of them calculated. Another layer was imagined resting on the first, and another on that, till the room was imagined full of foot cubes, and the answer to the teacher's original question was computed on the blackboard. By a similar process of imagining step by step, and measuring and computing as they imagined, the class were taught to find out the number of inch-cubes that could be packed in a box that was shown. Then the relation of the term foot-cube and cubic foot, inch cube and cubic inch, was explained, and a lesson for the morrow was assigned.

If those boys, thought I, as the class was dismissed, shall have no power to invent ways of accomplishing work and of surmounting difficulties, when they come to the business of life, it will not be the fault of the teacher. What is invention but the action of the imagination placed under limitations—Pegasus harnessed to the plough? The most complicated piece of machinery must have existed, "an airy nothing" in the mind of its inventor before it was realized in brass and steel, and what was the process of inventing it but the step-by-step action of the imagination under limitations?

It is my belief that it is simply because this kind of mental power is so little exercised in other studies and in the ordinary thinking of young people, that the majority of students find geometry and applied mathematics difficult.

It is as when one learns to swim. The motions of swimming require comparatively little muscular exertion, but because the muscles employed are those which receive little exercise otherwise, they are usually weak and undeveloped, and the man who could walk forty miles without great fatigue, is exhausted in swimming forty rods. So the inventive imagination needs to be developed that the man or the woman may be fertile in expedients for doing life's work and for meeting life's emergencies. Few, if any, other studies afford such

satisfactory exercise to this end as certain departments of mathematics. Indeed, who can tell how much of Yankee ingenuity is due to the much-berated prevalence of arithmetic in Yankee schools?

Another faculty that needs training is the power to form general notions and comprehend general principles. True, this may be obtained from most other studies, if rightly presented, but scarcely any other studies exercise this power so fully or so constantly as the pure mathematics.

Now if to the educational uses that we have considered, we add the practical value of mathematical attainments in the business of life (though doubtless this value is often exaggerated), we shall be convinced, I think, that these studies ought to continue to be a main feature in our courses of study.

Let us now consider the principles which ought to guide in determining the right sequence of the studies of any given department.

In the first place, it will probably be admitted that branches which appeal to the senses and imagination, and are capable of illustration with visible and tangible objects, should be studied before those which appeal mainly to the faculties of abstraction and generalization. This seems to be the order of nature. The latter faculties are comparatively late in development, and in untrained minds they are often scarcely developed at all. Some philosophers have held that the possession of these powers is characteristic of the human mind as compared with that of the brute. Be that as it may, teachers and metaphysicians agree that studies which appeal mainly to these powers should be placed late in a course of study.

Another consideration which should guide in arranging studies is this: A branch which aids in understanding another branch should, if possible, be studied before that other branch. If two branches are mutual auxiliaries, that one should be studied first which is most helpful towards understanding the other.

Again, in view of the fact that many pupils leave school without completing the course, those branches which are most valuable for mental development, or which, to the average pupil, are most likely to find application in the affairs of life, should be introduced as early as possible; while at the same time there should be regard to the symmetry of mental development; that is, no one kind of training should be abnormally pushed at the expense or the entire neglect of a kind of training equally important.

Lastly, monotony should be avoided as far as consistent with more important considerations. The line of thought which has been pursued for years becomes tedious to the pupil, and he will accomplish more and better mental work with fresher mental pabulum:

From all these considerations, it is my opinion that plane geometry ought to precede algebra in our courses of study.

The ideas of geometry are capable of concrete illustration. With a little labor and care at first on the part of his teacher, the pupil may be made to see "with his mind's eye" the angles and forms of which he speaks and reasons. He can compare them for himself and discover relations not shown him by his text-book. The methods of work are very different from those to which he has been for so many years accustomed in arithmetic. Though the rigorous demonstration exacted is new to him, if the teacher is careful and the text-book well chosen, he soon becomes familiar with the methods of geometry, begins to appreciate the perfection of its logic, and pursue the study with increasing pleasure and enthusiasm. The ideas of algebra, on the other hand, are pure abstractions, abstract numbers and abstract relations of numbers. Probably the pupil learns to perform a sort of jugglery with a , b , c , and x , y , z , and rests content. The equation is to him a kind of mill. He puts in an x , turns the crank of transposition, etc., and the answer drops out. Under my observation, pupils who have not studied geometry, rarely comprehend any but the very simplest demonstrations of algebra. They memorize the definitions, learn to "do" the examples in a mechanical way, and that is nearly all. Those who have studied elementary geometry before beginning algebra, are able to appreciate the force of a chain of reasoning, and carry the steps in the mind. They therefore readily comprehend the theorems and demonstrations of algebra, and perceive the logical force of a series of equations. They get from the study all the discipline that it can afford, while to those that study algebra first, the latter study is, in many cases, almost a waste of time. As these do not learn to appreciate the force of a chain of reasoning, they are little better prepared to begin geometry after having studied algebra, than when they left off arithmetic.

Moreover, as we have seen, the more useful study ought to be pursued first, if the pupil is prepared for it, because many pupils do not finish the course. The elements of geometry are more useful than the elements of algebra in all but one of the six uses which we have enumerated for mathematical studies. Geometry is better for forming the habit of continuous and individual attention. The young student soon learns that during a demonstration, whether he is studying it or reciting it or inventing, it "if his wits be called away never so little, he must begin again." In elementary algebra, much of the work is of a more mechanical character, mere ciphering, and after a little practice can be performed without that concentrated attention which it is the especial province of mathematical training

to make habitual. Geometry, more than any other study, brings into constant use the mental powers which are employed in demonstration, and makes its students apt in perceiving the relations and interdependence of truths. In fact, I am convinced that many students obtain from it their first ideas of what a demonstration really is. Otherwise, why do so many at first attempt to memorize demonstrations, although they may have studied higher arithmetic and algebra for years? If they really comprehended the nature of the logical process, they would see the absurdity of such expenditure of mental labor before the teacher could show it to them. Even in the study of geometry, a pupil may be allowed to miss almost all benefit, by a careless or incompetent teacher. Some years ago I was asked by our commissioner to conduct the examination for the State scholarship at Cornell University. Among the candidates was a bright girl who answered well in all the studies till we came to geometry. I asked her to prove that if a line intersects two parallels the alternate angles are equal. She looked puzzled and finally replied by repeating the theorem and two corollaries. "Yes," said I, "please prove it. Give the demonstration." A dazed expression came over her face, and there was an awkward pause. At length I said, "Just draw your figure on the blackboard there, and make it appear that your proposition is true." "Why, we never did that," was the reply. "We used to learn the parts that were printed in italics, and recite them," "But did not your teacher require you to give the demonstrations?" "Why, no! She used to ask us if we understood it, and if we didn't, she would explain it to us." It is needless to add that the school where such instruction was given, does not use the Regents advanced examinations. The incident shows that it is possible to make even geometry a mere exercise for memory.

As to the comparative value of a knowledge of geometry and of algebra in the pursuits of ordinary life, there can be no question. Some years ago an engraver came to me and said: "I want my boy to learn geometry. I can tell by an engraver's designs whether he has studied geometry. It gives him an eye for form." A tinner said to me: "My boy has got through the grammar school, and I can't afford to give him a full course, but I want him to study geometry. I had to learn it evenings after I had learned my trade, and I could not learn it thoroughly, but he shall have a chance to know it well." And so it is. In the arts of the builder, the pattern-maker, the designer, the machinist, the farmer, not to mention the navigator, the surveyor and the engineer, a knowledge of geometry is of great use, while algebra, though indispensable in the higher departments of architecture and engineering, is seldom needed for

the practical purposes of ordinary life. The former might be very closely associated with manual training.

When we compare the two sciences as tending to secure precision in thought and speech, we find that the terms of no other science have such definite meanings and require such precision in their use as those of geometry, and at the same time the language of geometry seems to approach more nearly to the language of common life and to be more readily intelligible than the language of algebra. As a means of training the mind to habits of perspicuity of thought and expression, and what is nearly the same thing, of fully comprehending the thoughts of other minds when expressed in terse and perspicuous language, we find the latter science, therefore, considerably inferior to the former.

Finally, as a discipline for the inventive and constructive imagination, that great thinker upon education, Herbert Spencer, speaking of the kind of exercises for boys and girls to which his father, a most skilful and enthusiastic teacher, gave the name of "Inventional Geometry," says: "To its great efficiency I can give personal testimony. I have seen it create in a class of boys so much enthusiasm that they looked forward to their geometry lesson as a chief event in the week. And girls initiated in the system by my father have frequently begged of him for problems to solve in their holidays." But we need not go abroad for testimony on this point. Probably no teacher who has felt or witnessed the effect of solving well-chosen geometrical problems will hesitate to declare his belief that geometry greatly surpasses algebra as a means of developing the power to invent.

The six uses of mathematical studies which were mentioned, seem to me nearly an exhaustive classification of the good results to be expected from these studies, especially. For five of these uses geometry seems to be more efficient than its sister science. For leading a student of sufficiently mature mind to form general notions and comprehend general principles, algebra is doubtless the better.

It would seem, then, that in our courses of study, geometry ought to be the study to follow arithmetic. Only two objections occur to me. It may be said that in the text books generally in use among us, the treatment of some propositions in geometry pre-supposes a knowledge of the transformations of the equation. But these transformations are easily justifiable by the axioms which belong as much to the one science as to the other. In fact, the transformations are likely to be more perfectly comprehended when taught as a part of a demonstration and justified by axioms, than when taught independently. It is only necessary that the teacher should guide the pupil a little at the right time in tracing the dependence of the process.

The other objection is that the pupils in our graded schools, who have just completed arithmetic, are not old enough to study geometry. It might be replied, "Then they are certainly too young to study algebra, for the metaphysicians are agreed that the powers of abstraction and generalization, on which a comprehension of algebra depends, are the last faculties to be developed." Of course, children may be taught to go mechanically through the process of algebra, but there is about as much mental discipline in it, as there is in turning a grindstone, and as not one in a thousand of them will ever use algebra for any practical purpose, *Cui bono?*

This plan of teaching geometry before algebra is not an untried scheme. My attention was called to it by a paper presented to the Regents' Convocation in 1881, by Professor Safford, of Williams College. On reading a very lucid and valuable paper presented to the Convocation of 1867, by Professor William D. Wilson, then of Hobart College, "On the Nature and Method of Teaching Mathematics," I found that he had been taught on this plan and seemed to approve of it. It is true that both these authorities favored intermingling the two sciences, or rather teaching parts of the elements of each alternately; but that seemed to me impracticable, for various reasons, among which was the want of a suitable text-book. I tried the experiment of teaching geometry first, liked it, and have kept it up for five years with increasing satisfaction.

I would only remark finally that, in my view of the matter, a man's education must be mainly his own work. He may be helped or he may be embarrassed greatly by his environment; but neither books, nor teachers, nor apparatus, nor other surrounding conditions of any kind will be of any avail, unless he himself furnish the energizing spirit which shall put them to account. A mind is not molded as an earthen vessel is fashioned by the hand of the potter. It molds itself by virtue of an inherent force which makes for symmetry or for deformity according to direction given it by consciousness and will. Libraries, universities, museums, and foreign travel are powerful auxiliaries to a man who is determined to be educated; but he will find them of no avail if he makes them anything more than secondary instrumentalities in the work. On the other hand, no lack of such advantages will prevent a man from securing a valuable education who is resolved to educate himself. Witness, for instance, a Benjamin Franklin, a Hugh Miller, a Michael Faraday, and an Abraham Lincoln.—President F. A. P. Barnard, in the *May Forum*.

ANOTHER WAY OF BEGINNING THE STUDY OF A LANGUAGE.

PROF. CHARLES M. MOSS, BLOOMINGTON, ILL.

I have no quarrel with the advocates of the Natural Method. I have seen some of its best exponents endeavor to carry it out, but have not seen them succeed. Those whom I have not seen probably succeed. Doubts of its success were first suggested to my mind while teaching in a school where a Brazilian entered who did not know a word of English. No one there knew a word of Portuguese. The first assaults on these twin citadels of ignorance were sufficiently ludicrous, but as it was a case of life or death with him, he learned to speak English almost like a native within five months. At the end of that time several friends of his also entered, none of whom knew a word of English. I counseled the fellow to speak English and to make them do so. He did not heed the advice, and at the end of the school year he could scarcely make himself understood except in the most ordinary matters. It occurred to me that the attempt to speak German, or French, or Latin, or Greek, an hour or two a day, in a bungling way, and use English the other part of one's waking hours, was a bad case of *hysteron-proteron*, and must account for the failures I had observed in German, French and Portuguese. I see no reason as yet to change the opinion. With German the Natural Method can be used to perfection in Germany, aloof from all English-speaking people. It may be made a tolerably useful adjunct in America under favorable circumstances, which do not often exist.

It is doubtful whether the Natural Method is used to any great extent in teaching the classics. Instead, there has been a gradual evolution from the learning of the grammar complete before doing anything farther, up to the first books now in general use. It is a curious study to trace this development if one has the books published during the last hundred years at hand. These first books or lessons have the advantage of introducing pupils to sentences at a comparatively early period. But we have heard at different times several criticisms upon them which appear to us to be just, and the deficiencies thus criticised seem to stand in the way of a pupil's proper advancement. They are said to introduce irregular forms too early in too great numbers, to introduce too long vocabularies at

the outset, and that, sometimes, of words not frequently met, to introduce too many of the matters treated of in the early part of the grammars, and finally to keep the pupil away from reading too long. It certainly is not the *language* that one studies in detached, and hence largely meaningless, sentences.

Feeling the force of these criticisms, and perhaps with an eye to the decrease of their departments, some instructors have followed another method which, it would seem, is worth consideration, and, indeed, a faithful trial. They say it works well—better than anything else tried. I will append a statement of the “method” as it relates to Greek.

Classes are furnished with grammars only, at the outset. The alphabet is first learned, and work at the first declension immediately begins. For a time pupils are told to learn the accent and breathing marks as they stand. Three forms of the present indicative active of three or four regular verbs are next given, when the pupils are set to framing simple sentences, making up their own English. It is said that this latter will beget more independence, and more insight into the formation of sentences, than any other method. Of course explanations are interlarded wherever necessary, but that necessity is made to depend largely on the questions asked for the first few weeks. Next comes, within a week of getting the grammars, some easy reader, in which, from this time on regular lessons are assigned. Of those words set in the grammars for declension, none are learned except those known to occur frequently. The others are learned when met in the reading. The method thence is much the same as that followed in the beginning books, but a great deal of the minutiae of the work is omitted till an example occurs in the reading demanding explanation, when reference is made to the appropriate section of the grammar. The moods of the verb are learned when examples occur in the reading, and some of those partly conjugated are omitted till needed, as the contracts. The work of framing illustrative sentences is continued through syntax. No stress is laid on learning the parts of the verbs till this work is done, which takes something over a year.

The method of conducting the reading aims first and always at facility in ready and correct translation. There is an erroneous opinion afloat that these two specifications cannot be made to harmonize in the work of young students. It is suspected that this largely depends upon the instructor. To gain the end mentioned the teacher does a great deal of pronouncing of the text to bring out the sense—to show that Greek and Latin need not be read as monotonously as a boy repeats his letters. Constant reference is

made to places where words have been used before, to the necessity of certain words meaning certain things in the connections in which they stand. And so forth, by such a variety of means as will suggest itself to a live instructor.

The advantage claimed for this method is that it does all that can be done with beginning books, and in a less mechanical way, and gives pupils an earlier insight, as well as a better one, into the Greek and Latin as literatures. Certainly some of the successes with it are worth studying as phases of instruction, if nothing more. Two necessary corollaries of the method are, (1) that it requires more work of the tutor, and a constant vigilance on his part to keep the reins well in hand; besides, his pupils must never suspect that he cannot lighten their path at any step, and (2) that stress is laid on making the memory of pupils take the place, to no small degree, of thumbing dictionaries. The latter is a good thing to do in its place, but its place can hardly be to "look up" words met a reasonable number of times in reading, whatever be the method with the pupil at the start, or afterward.

While this scheme makes little use of the Natural Method, as commonly understood, it is a question whether it does not attain some of the ends supposed to be the peculiar property of that method. Properly carried out, there is nothing in the method by beginning books which may not be gained by this.

Possibly this necessarily imperfect sketch will be of aid to some by way of suggestion, if not as pointing out a road to be followed to its end. The writer purposes to give it a trial during the coming year.

At a meeting of secondary teachers held July 16th, at Topeka, Mr. Charles Parker of Illinois, was elected chairman, and Mr. J. P. Cushing of Massachusetts, secretary. Principal Boltwood of Evanston, Ill., reported for his committee that upon the petition presented that morning to the council, a Department of Secondary Education had been established. The report was accepted and the committee discharged.

An organization was then perfected with the following officers :—
Prest., George A. Bacon, Syracuse, N. Y. Vice-Prest., Henry L. Boltwood, Evanston, Ill. Secretary, Paul H. Hanus, West Denver, Col.

INTERCHANGE.

Communications upon any inside school topic may be addressed to G. R. CUTTING, AUBURN, N. Y. The subject for November will be: "The Natural Method of Teaching Modern Languages."

RHETORICAL EXERCISES IN HIGH SCHOOLS AND ACADEMIES.

The subject of this month has worked a wide-spread interest among teachers. To avoid repetition, it will be necessary to summarize the points made by those who have given attention to the subject.

Rhetorical Exercises—as usually considered—include declamations by the boys, recitations or reading of extracts—usually poetry—by the girls,—interspersed with compositions read by either sex, and the whole program anon relieved by music, vocal and instrumental. In this broader limitation, rhetorical exercises include Elocution and English composition. An *Interchange* in a future number will be devoted to English composition. The present investigation proves that in most schools, there are rhetorical exercises in some form or other.

FACTS AS TO PREVAILING METHODS.

The methods in use may be classified into three groups;

1—The Individual Method.

2—The Class Method.

3—The Society Method.

Whatever the method, the appointments are usually compulsory.

In what we call the individual method, the appointments to speak, recite, or read, are given to individual pupils to appear before the whole school. Some teachers have found the best results in bringing all pupils before the whole school regardless of classes, in alphabetical order. No instruction is given save to the individual in rehearsal, except occasional general criticisms before the school.

Time. A common custom prevails in some sections of taking ten or fifteen minutes of the opening exercises of each day for rhetorical exercises. In most schools, however, they occur on the last hour of each Friday afternoon. In a few, alternate Friday afternoons are

used; and occasionally a principal reports their occurrence only once a month.

Rehearsals. In most schools, rehearsals in preparation for these are given. Usually they are outside of school hours, the work being divided among all the teachers; in many, a teacher of elocution takes charge of individual rehearsals; in some, no preparation is made for which teachers are responsible.

Selections. Here customs widely differ. In some schools, the pupils make their own selections; in others, the teachers alone assign selections; in the most, selections are made by the pupil, subject to the approval of the teacher. In a few schools the advanced class is required to deliver or read their own compositions. The observance of authors' days and the anniversaries of historical occasions, is a growing one among the schools.

The class method prevails in the larger institutions, where the school is divided into classes for systematic rhetorical work, just the same as for mathematical study. Under this plan the teachers report increased attention paid to voice culture and class drill in all varieties of elocutionary exercises. Usually some text book is used as a basis of study. Systematic work in English composition is reported in connection with the elocution class, these two departments of study being under the direction of one teacher. The exhibition element does not largely prevail under this method; though a few teachers mention an occasional "Public" at the end of a term, where parts are assigned to those pupils who have done best in class work.

The society method, as pursued in many schools, especially in many of the Union schools of New York State, is well represented in the subjoined letter of Principal Hutton, of Santa Rosa, Cal. Local conditions modify the membership and system of government of these societies; and an *Interchange* on the latter point has been solicited. Suffice it to say here that some schools have found it advisable to unite the class and society methods—giving alternate Fridays to each. The opinion largely prevails that teachers must be in direct control of all such societies, at least must be the power behind the throne, to insure permanency and profit. In many schools the boys are organized into societies largely for debate, the girls into separate societies for general literary exercises. It seems to be largely conceded that societies of long standing, with their annual reunions, are among the best means to enlist the graduates in maintaining their interest in the school.

In all methods of conducting rhetorical exercises that have been detailed, there is a prevailing tendency to divorce declamation and recitation from English composition work; perhaps to magnify the

latter by developing it in connection with English literature and other class exercises. The subjoined letter of Principal Boltwood, of Evanston, Ill., illustrates this.

A SUMMARY OF PROS AND CONS.

Good Effects :

The exercises in declamation and recitation give students a self-control and self-possession in the presence of an audience that they could get in no other way.

They teach pupils to speak with effect, illustrating the principle of learning to do a thing by doing it.

They teach pupils to interpret an author.

They correct natural defects in speech and manner, affording the most convenient occasion for criticism by teachers and fellow-pupils.

They develop or "bring out" some pupils as nothing else will, inspiring them to complete higher courses of study.

They furnish one desirable kind of memory-training.

They store the memory with valuable extracts.

They furnish occasions to attract outsiders within the school-room. These friends may thus become interested in the general work of the school.

Where the older and more proficient pupils give individual drill in elocution to others of the class—an expedient frequently reported where there is no special teacher in elocution—they give a desirable opportunity to test the teaching ability of such students.

Ill Effects :

Those with whom such rhetorical exercises are in disfavor, say that they distract teacher and pupil from the legitimate work of the school.

They do not pay; that is, the results are not proportionate to the expenditure of time and labor necessary for both pupil and teacher.

They tend to make pupils merely imitators.

They give undue prominence to a superficial attainment; for the best declaimers and reciters are often the poorest in general scholarship.

They sometimes subject pupils in public to criticisms that are unfair, often tending to their discouragement in other school work.

They often develop an undesirable ambition for appearance in public, especially among young ladies, who—as a class—should not be educated for appearance on the stage.

CONCLUSIONS.

The inquiry to learn what the High schools and Academies are doing in rhetorical work, leads to a few conclusions:

(1.) That the elocution craze of a few years ago has spent its force.

(2.) That a healthier study and interpretation of standard English have quite largely supplanted the miscellaneous "speaking pieces" of the past.

(3.) That success or failure with either method of conducting rhetorical exercises will depend largely on the ability, taste and enthusiasm of the instructor in charge,—on the personal element in the teacher.

(4.) The special needs of each school must largely determine which general method, or combination of methods, is best adapted for each. Many principals do not feel the need of adopting any method to enlist the public in sympathy with the school. Other principals seem to regard co-operation thus secured an essential to their hold in the community.

(5.) The best results are claimed where special teachers are employed to do the work required.

(6.) The golden mean should be aimed at,—the use, not the abuse of rhetorical exercises. Ridden as hobbies they are not healthful in their influence in community or school.

PRINCIPAL HENRY L. BOLTWOOD, EVANSTON, ILL.

My plan of conducting rhetorical work varies with different classes, according to the material with which I have to deal. I use no textbook in rhetoric, preferring to draw the principles which underlie correct expression from the authors which are studied by the class.

All rhetorical work, with a single exception, is done in the classroom, and not before the assembled school. There is less formality about it, and much more freedom. Pupils who declaim readily before the class are almost paralyzed with fear at the idea of appearing before the assembled school.

Reading of English authors is carried through the four years' course. It is my design to have an English classic read as thoroughly as a Greek or Latin classic should be. Every figure, every reference, every allusion, every peculiar construction or idiom, every derivation or corresponding word that may reasonably be within the range of the class is insisted upon. This, of course, gives ground for rhetorical work. Peculiarities of style are learned by observation and comparison.

The reading of the first year is principally from the Student's Fifth Reader, the notes to which were prepared with reference to this kind of work. The written work done consists in sketches of authors, reproduction of lessons, and full outlines of stories or poems from which

extracts are read. The mechanical part of composition work is made prominent. Paragraphing and punctuating receive special attention. The memorizing of choice passages is made a frequent exercise, and these are recited, at first as any other lesson would be recited, the pupils simply rising in their places. Afterwards they are called to stand in front of the class, but little attempt is made to give formal declamations.

In the second year, the American poets are read—Longfellow more than any other. The subject of metre is carefully presented. The written work consists of sketches, essays and criticisms, based mostly upon the matter read. Longer passages are memorized and more pains is taken with the delivery. The general principles of correct elocution are taught.

In the third year, Macaulay, Scott, Shakespeare, Emerson, Tennyson, De Quincey and Irving are read—not all, of course, but these are among the authors from whom selections are made. The pupils are made more or less familiar with good English prose, the essay as represented by Macaulay and De Quincey, or Emerson, the sketches of Irving, the dramatic style of Shakespeare. The written work is now of a character which requires more outside reading, comparisons of style of different authors, sketches of different characters, outlines of plays of Shakespeare. The declamations required now are chiefly in prose.

In the fourth year, the study of General History and English Literature are made prominent, and the written work is based principally upon these studies. The history class writes upon such themes as "What Constitutes Civilization?" "What are the Factors of Civilization?" "What are the 'Four Pillars of English Liberty,' and What is the History of Each?" Comparisons of historic characters, and discussions upon the justice or injustice of certain popular judgments of great men are common. In literature, book reviews and outlines of volumes or particular poems or plays are frequent themes.

In this year, for the first time, the pupils appear before the collected school with formal declamations. These are given one by one, at the morning general exercises. The class receives some general drill upon elocution proper, by itself.

I am not satisfied that my plan is the best. Much of its success depends on the power of the several teachers to make the English reading successful. I can find five good Latin or mathematical teachers to one who can teach English successfully. If I could find time to put in more of this work earlier in the course, I should be glad to do so.

My main idea is to give the pupils plenty of material to work upon, and accustom them to careful and constant statement of what they

read and observe. I do not expect them to originate much except by careful reflection on what they have carefully read. I expect them to form style by unconscious imitation and absorption of what they have read carefully and critically. I may undervalue elocution, but I have thought that we are prone to overdo this, and I have very likely gone to the other extreme.

PRINCIPAL CHAS. E. HUTTON, SANTA ROSA, CAL.

I have used the following plan of rhetorical exercises for nine years, and it has been measurably successful, because it throws the responsibility upon the pupils themselves. When the school is large enough, I divide it into two literary societies. My school has ranged between sixty-five and eighty. If it were small I would have only one; if it were much larger than mine I would separate into two general divisions. Two points I have in view: 1st. Each pupil must have an exercise once a month. 2nd. Two societies produce competition and rivalry. With me this has always kept within rational bounds.

Each society elects its own officers, president, vice-president, secretary, two critics and an editor. Friday afternoon is devoted to these exercises, each society alternating. The whole responsibility devolves upon the society, the officers preside and take the whole charge of the meeting. I am present, but only to take cognizance, if there is disorder. I make them feel the responsibility of their work. The meeting is called to order by the president, minutes of the last meeting read, etc. Any outside work or deviation from the general program is done by regular motion under parliamentary form. The meeting is dismissed not by me, but by regular motion to adjourn. Such proceedings give them an idea of parliamentary practice.

Each society is divided into two sections, one of which holds exercises, alternating with the other society. Each section is divided into four classes; these give recitations, essays, readings and debates. They must do just what comes in order; by this means each member succeeds regularly in recitation, essay, reading and debate. He has no right to choose what he prefers, and therefore has drill upon all. They take a great deal of interest in the work, and it is very seldom I have occasion to reprimand any one for neglect of duty. I do not assign any subject for them, I leave them free to choose. Frequently they submit subjects and ask my opinion. The debates are often conducted with merely notes. Of course this is very valuable practice. A committee of three is appointed from the school to decide the debate, and a decision is rendered before adjournment, with the reasons.

To keep up life and animation we have each Friday a school paper, composed mainly of matters about the school. The critics report at the next Friday the criticisms they have made, including the presentation on the rostrum, and the character of the matter, mainly upon the latter in essays and written debates. I have found a great deal of stimulus in this work. I do not have to look after it, for it runs itself. Sometimes the interest flags, but that occurs also in the school-room work. My graduates have many times spoken to me of the advantages that accrued to them from these exercises.

The school is sometimes apt to tire of the same work for a whole term, and to avoid this I use about three Fridays in the term for special exercises, one for each class. I have a day of authors, or great historical events, or noted buildings, or something that will interest and broaden their knowledge. This plan has shown the following results :

1st. It makes the pupils responsible.

2d. It gives them some elementary knowledge of parliamentary proceedings.

3d. It builds up an enthusiastic interest in the exercises.

4th. By requiring the pupils to take each exercise in successive order, it trains them in all alike.

5th. Being made a rule of the school, it reduces to a minimum any necessary disciplinary regulations.

6th. It arouses competition.

7th. It makes a pleasant and agreeable closing of the week's work.

8th. By the free scope given, it tends to broaden the class.

9th. It cultivates self-reliance.

The plan is outlined in the scheme appended.

IRVING LITERARY SOCIETY.

SECTION 1.	July 23.	Aug. 20.	Sept. 17.	Oct. 15.
Class A.	Recitation.	Essay.	Reading.	Debate.
Class B.	Essay.	Reading.	Debate.	Recitation.
Class C.	Reading.	Debate.	Recitation.	Essay.
Class D.	Debate.	Recitation.	Essay.	Reading.
SECTION 2.	Aug. 6.	Sept. 3.	Oct. 1.	Oct. 29.
Class A.	Recitation.	Essay.	Reading.	Debate.
Class B.	Essay.	Reading.	Debate.	Recitation.
Class C.	Reading.	Debate.	Recitation.	Essay.
Class D.	Debate.	Recitation.	Essay.	Reading.

The other society uses the intermediate dates.

PRINCIPAL S. THURBER, MILTON ACADEMY, MASS.

My answers assume that by "rhetorical exercises" the ACADEMY means exercises in speaking and declamation, or rhetorical exercises in their narrower sense, not including writing or voice-training.

Pupils should commit to memory pieces of prose and poetry that have the qualities adapted to stir and impress youth. Passages that inculcate self-sacrifice and exact the generous sentiment are always at hand, and some portion of each day should be devoted to the recitation and the hearing of such pieces. A few pupils should be ready every day and all should listen. Repetitions of a more formal character, to which parents may be invited, should occur every two or three weeks. The arts of the elocutionist should be sparingly used. The exercises should be conducted in the spirit of Lamartine's maxim: "*La nature est un maitre d' attitudes plus souverain et plus infallible que Talma.*"

Such exercises as are indicated above have in view the esthetic and moral nature. To sharpen the wits and inspire the speaker's self-confidence, recitations or declamations are useless. For this purpose we must have *ex tempore* debates. A good debating society is a valuable adjunct to a school. But the teacher should organize debates as a school exercise and preside over them as judge and critic. To learn how to do a thing, do that thing. To learn how to speak *ex tempore*, the only way is to speak *ex tempore* and do it often.

I read that on a momentous question set up for debate a certain professor made an excellent speech, but that a certain other professor made one rather better; and this is the whole report of the debate. *Art for art's sake* has been a live issue of late. The danger of the "rhetorical exercises" is that we come to value the speech for the speech's sake. Of modern educational speech-making it may be said that the trail of the elocutionist is over it all.

Everett Hayden, Assistant Geologist of the Division of Volcanic Geology, United States Geological Survey, Washington, D. C., in a recent letter published in *Science*, requests all observers who have any definite knowledge of the phenomena in their own localities accompanying the great earthquake of August 31st, to write to the above address stating as exactly as possible all details as to time, violence, form, etc. Those of our readers who are able to contribute anything to his assistance, will find in *Science* for September 10th, seven points on which he especially wishes information, or the same points can be obtained by writing direct to Mr. Hayden.

NOTES.

THE ACADEMY is mailed to all subscribers promptly on the first of the month. Subscribers should inform us if it is not received within two days of the time when it ordinarily reaches them.

We have learned that we were mistaken in saying last month that the Auburn board of education had found it necessary to secure the removal of every principal in the high school for fourteen years.

In noticing Prof. Painter's *History of Education* last month, we omitted to call attention to the author's strange mistake, page 190, in attributing to Milton the lines beginning, "I am old and blind," which were written by Elizabeth Lloyd Howell on Milton. The mistake is the more strange as the lines are entirely un-Miltonic.

Dr. Murray is reported to have sailed from Liverpool September 18th, and before this reaches the eyes of the readers we expect he will have resumed his work at Albany. We trust the report that he is well again is no mistake, and that he will long be able to remain in official relation with the schools to whom this relation has been so pleasant.

Last year many were unable to come to the Holiday Conference because of previous engagements elsewhere. Now those teachers can make their arrangements with the Conference full in view. *The Associated Academic Principals* will meet in Syracuse, at the High School, December 28 and 29, 1886. Special rates will be given at the hotels, and every effort will be made to have a profitable meeting.

Houghton, Mifflin & Co., announce a new and uniform edition of the life and works of Louis Agassiz, in six volumes. Price \$10. This set includes "A Journey in Brazil," which formerly cost \$5. To their series of American Commonwealths, the same firm has added "New York," by Ellis H. Roberts, editor of the *Utica Herald*, and to their American Statesmen series, "Thomas H. Benton," by Theodore Roosevelt, "Henry Clay," by Carl Schurz, "George Washington," by Henry Cabot Lodge, "Martin Van Buren," by William Dorsheimer, and "Patrick Henry," by Moses Coit Tyler.

Of special interest to teachers of science will be "A Century of Electricity," by T. C. Mendenhall, one volume, 16mo., with illustrations. Price \$1.25.

"August 31, at 9:45 P. M., the steamer City of Palatka, Captain Voegel, when a mile and a half north of Martin's Industry Light Ship, (off the coast south of Charleston), in eight and a half fathoms of water, experienced a terrible rumbling sensation, lasting a minute and a half. There was quite a heavy sea from the south-east after leaving Charleston bar at 5:30 P. M. When this rumbling sensation took place, the wave-motion ceased. It was a perfect calm during the rumbling; after that, the usual motion of the southeast swell took place. The wind at the time was southwest, light, weather cloudy, barometer 30 degrees 1 minute, thermometer 80 degrees. The sensation resembled a ship scraping a pebbly bottom, and the vibration of the ship was very great."—*Science*, September 10.

Education begins its seventh volume in the September number with renewed vigor and in very attractive form. It seems to us the best number of this journal we have ever seen. The subjects discussed cover an unusually wide range. Mr. Thurber's translation of Giuseppe Sergi's article from the *Rivista Pedagogica Italiana* presents a new phase of an important subject, and so deserves a careful reading from every one who wishes to know anything of philosophical pedagogy. Principal Russell of the Worcester Normal School has been for some time pursuing a line of investigation similar to that of Professor Sergi. Such investigations conscientiously carried out involve a vast amount of labor, and only by generalization from a great number of observations can any trustworthy results be obtained. We hope our readers will some day be able, either through *Education* or through THE ACADEMY, to hear Mr. Russell's report.

In his address at the unveiling of the statue of the founder of the Mason Science College, Sir John Lubbock recently stated that in England out of two hundred and forty endowed schools for boys, where inquiries have lately been made, fifty-four have no provision whatever for teaching science. In fifty others only one hour per week is devoted to it. In seventy-six there are less than three hours per week, and only fifty-six devote to it one hour a day. According to the report of the Commissioner last year, there were only three schools in all Great Britain in which science is fully and adequately taught. In view of these facts, when we remember the immense amount of time devoted to the ancient languages, particularly Latin, the present revolt against the tyranny of the classics excites no wonder. We should remember, however, the great differences between courses of study in England and in this country, and not carelessly transfer arguments against the classics to the exclusion of the sciences, into arguments for the entire ignoring of classical studies.

The whole number of persons treated thus far for rabies by Dr. Pasteur is 1,656. One thousand and nine of them were French, of which number three have died. One hundred and eighty-two were Russians, of whom eleven have died. Twenty were from Roumania, of whom one has died. Of the remaining four hundred and forty-five, from England, Austria, Algiers, America, Brazil, Belgium, Spain, Holland, Hungary, Italy, Portugal, Turkey and Switzerland, not one has died. It is thus seen that only fifteen deaths have occurred out of 1,656 cases. It is proper to add that among the Russian patients were fifty who had been bitten by rabid wolves, and of this number eight died in spite of the treatment. Deducting this from the whole, out of 1,606 persons bitten by dogs, only seven, or a little over four-tenths of one per cent, have thus far failed to yield to the treatment. If these statistics may be accepted as trustworthy, it would be hard to find even among the milder types of disease more uniform and conspicuous success.

In this connection it may be of interest to remark that Professors von Frisch and Ullman of Vienna, after careful and exhaustive investigation, have confirmed the views of Pasteur as to the possibility of preventing the development of rabies by inoculations with the virus obtained from rabbits, and are now prepared to treat victims of rabid dogs.

In his recent address before the British Medical Association, Dr. Withers Moore discusses the Higher Education of Women from a novel but practical point of view. In his mind there are two channels for the expenditure of a woman's vital force:—maternity, on the one hand, and competition with men in the severer exercises of the intellect, on the other. As a physician he finds these two functions mutually exclusive. Gestation and maternity require an enormous outlay of physiological force, and if this force is used up in other work, the offspring of the world must suffer, as must the woman herself. Since only through woman can the human race be propagated, it seems to him that divine foresight ordained this as the natural function of woman. "Educate woman and you educate a race," if interpreted to mean education of the mind to the exclusion of the body, can bring only disaster. There is no need at the present time that women should do men's work. We can not make a man able to perform woman's duties, nor can woman perform the work of men without harm to herself and her offspring. It is far better to prepare woman to do woman's work by the broadest training, physically and mentally. In the words of *Science*, "Dr. Moore's treatment of the subject shows a large experience with the every day life of the women of the present time, and will well repay most thorough and careful perusal."

The newspapers usually take delight in poking fun at college athletes, but the Boston *Herald* takes ground on the other side and has just given the standing of the various members in the nine and in the crew at Harvard, obtained from the annual rank list. Since the classes are very large, to be on the list at all is usually equivalent to being in the upper third of the class. In this last rank list is found the name of every man in the University crew, and seven out of the base ball nine. One of the latter is tenth in his class, and two others stand in the first twenty-five, out of a class of two hundred and fifty. The stroke of the crew received at commencement the degree of Doctor of Philosophy for ability and faithfulness. We think these statistics represent a state of affairs by no means exceptional. The writer well remembers playing ball in a University nine, only one member of which was below the middle of his class, and pulling in the University crew, all of which stood in the upper half of their respective classes.

People who laugh at college athletics usually forget that to excel in these sports requires the same determination and the same self-denial that is necessary to succeed in study. Furthermore they forget that exercise and study are the two things in a college course which go best hand-in-hand. We remember the remark once made of a famous stroke at Harvard, that the only two things he did while in college were to row and to study.

The question of the fitness of *Cæsar's Commentaries* to be used as a Latin reading book for boys has been broached by THE ACADEMY. As a contribution to the pending discussion, we cite the opinion of Prof. Nohl, of Neuweid, Germany, who goes so far as to claim that on not a single page of the *De Bello Gallico* is to be found anything elevating for young pupils. The brute violence and cunning with which this shrewdest of Romans proceeds from conquest to conquest and achieves the enslavement of a free people that had done his country no harm, and the hypocrisy with which he makes heroes and patriots appear as perjurers and traitors, can have only a pernicious influence upon the morals of modern youth, if indeed modern youth pay sufficient heed to the story to comprehend its purport. What a boy, who knows nothing of the military system of his own country, learns about the Roman *hastati*, *principes*, *triarii*, *primi pili*, etc., acquires for him no culture-value from the fact that these things belong to classical antiquity. In his first Latin author the boy is introduced to arms and fighting, to merciless bloodshed and lust of conquest, to fraud and subtlety.

This is a very extreme view of the matter. Few teachers on this side of the water will be inclined to agree with Prof. Nohl. As one

of our correspondents expresses it, "These young ducks are well oiled against wetting from the classic waters in which they swim a few years of their childhood." Probably few of our readers will agree to the wholesale denunciation of the great Roman in which the German critic is pleased to indulge. Even granting that all Cæsar's actions, sentiments and purposes were wrong, it ought not to be difficult for a teacher to draw great moral lessons from them, whereas from a literary point of view, as models of composition they have no equal. They show us the orator who at Rome was second only to Cicero, the annalist who is without a rival, the statesman whose far-reaching foresight has never been equalled.

ANNOUNCEMENTS OF NEW BOOKS.

D. C. Heath & Co., of Boston, announce for September, "An Introduction to the Study of Robert Browning's Poetry." By Hiram Corson, M. A., LL. D., Professor of Rhetoric and English Literature in the Cornell University.

The same firm announces, for October, a book on Manual Training by Professor C. M. Woodward of Washington University, St. Louis.

Leach, Shewell & Sanborn announce "Good Reading: for School and Home," Original and selected articles for supplementary reading. The original articles are "Gettysburg," by Col. Clarke; "Arctic Scenes," by Lieut. Schwatka; "A Whaling Voyage," by Geo. F. Cary; "Samuel Adams," by Prof. Hosmer, and "Daniel Webster," by Dr. Mombert. Price 60 cents. 300 pages.

"Well's Plane Geometry," by Webster Wells, S. B., Ass't Prof. of Mathematics in Mass. Institute of Technology, and Author of "Plane and Spherical Trigonometry," "Universal Algebra," "Academic Algebra," "Logarithms," etc. The complete work of Plane and Solid Geometry will be ready in November.

"Forty Lessons in Punctuation and Use of Capitals," by Milton Quay, Teacher of English in the Pingry School, Elizabeth, N. J. This is to be uniform in style and size with their "Number Lessons." Price 72 cents per dozen; or, delivered in any part of the country at 85 cents per dozen.

BOOKS RECEIVED.*

Sheldon's Elementary Arithmetic, with Oral and Written Exercises. Sheldon & Co., New York and Chicago. 1886.

Sheldon's Word Studies, containing graded lessons in the orthography of words, and their correct use in sentences. Sheldon & Co., New York and Chicago. 1886.

*Any of these books may be more fully noticed hereafter.

Elementary Lessons in Greek Syntax. Designed to accompany the reading of Xenophon's *Anabasis*. By S. R. Winchell, A. M. New York: D Appleton & Co. 1886.

Molière's *Les Fourberies De Scapin*. Edited with introduction and notes. By Gustave Masson, B. A. (University Gallic), Assistant Master in Harrow School, Oxford: at the Clarendon Press, 1885.

Les Demoiselles de St. Cyr. Comedie par Alexandre Dumas, with introduction and notes. By Victor Oger, Lecturer in University College, Liverpool, and Victoria University. London: Macmillan & Co. 1886.

Rudimenta Latina comprising Accidence and exercises of a very elementary character for the use of beginners. By John Barrow Allen, M. A. Oxford: at the Clarendon Press, 1885. London: Macmillan & Co.

Entertainments in Chemistry. Easy lessons and directions for safe experiments. By Harry W. Tyler, S. B., of the Massachusetts Institute of Technology. Chicago: The Interstate Publishing Company. Boston: 30 Franklin Street.

Through a Microscope, Something of science, together with many curious observations indoor and out, and directions for a home-made microscope, by Samuel Wells, Mary Treat and Leroy Sargent. Chicago: The Interstate Publishing Company. Boston: 30 Franklin St.

Elementary Classics. Extracts from Lucian. Edited for the use of schools, with introduction, exercises, notes, and vocabulary. By Rev. John Bond, M. A., Chaplain Royal Military Academy, Woolwich; and A. S. Walpole, M. A., Assistant Master in Rossall School. London: Macmillan & Co. 1886.

Essential Lessons in English Etymology, comprising the history, derivation, composition, and relationship of English words; with lists of prefixes, suffixes, stems, doublets, homonyms, etc. For the use of schools. By John G. R. McElroy, A. M. Philadelphia: John E. Potter & Company.

This book is more interesting than the ordinary text-book of the kind. The introduction of good prose extracts at the outset as a basis of study, is to be commended. So is the author's method of beginning with the simplest forms of derivative words, i. e., words that any child can at once see are compounded from other words.

The Autobiography of Benjamin Franklin, with notes and a chapter completing the story of his life. Part I. From his birth in 1706 to the publication of the first number of *Poor Richard's Almanac* in 1732. Boston: Houghton, Mifflin & Co. 1886.

Few works are more desirable for young readers, both from literary and moral considerations, than this Autobiography of Franklin. Apart from his prominent place in the real history of our country, Franklin's example as a youth born to the humblest circumstances and rising to the highest eminence in many fields of exertion deserves to be brought to the notice of every boy and girl in America. The frankness with which he acknowledges his errors is fully complemented by the sincerity with which he demonstrates his practical faith in virtue.

Dillard's Exercises in Arithmetic. Progressively arranged for purposes of review and examination in public and private schools. By James H. Dillard, M. A., Associate Principal of the Norfolk Academy. Formerly Assistant Professor of Mathematics in Washington and Lee University. Philadelphia: John E. Potter & Co.

This book reveals on every page the hand of a practical teacher, one who has worked in the class-room and knows its needs. It will be specially valuable to those who are preparing pupils for examinations outside of their own schools, for it gives a variety in the wording of questions, and will accustom the learner to different styles of questioning.

The Development of the Roman Constitution. By Ambrose Tighe, formerly Tutor and Douglas Fellow at Yale College. New York: D. Appleton & Co. 1886.

This book is an admirable compilation, written in a pleasing style without effort and with no pedantic display of learning. The author at the outset frankly disclaims all pretense at originality, but he has succeeded in making a thoroughly readable book and one likely to be helpful to those who have made a considerable study of the subject, as well as one that will assist the student who is just beginning. For reasons which he deems sufficient, the author has followed Mommsen, even where his own opinions do not entirely agree with those of the great German historian. We should have thought it better to have followed another course on some points, for example, regarding the origin of the *Comitia centuriata*. But we do not know of any book which gives so good a general view in so compact and readable a form.

The Jugurthine War of C. Sallustius Crispus, edited with an introduction, notes, and a vocabulary. By Charles George Herberman, Ph. D., LL. D., Professor of the Latin language and literature in the College of the City of New York. New York: D. Appleton & Co. 1886.

School editions of Sallust are not numerous enough or good enough to make the issue of a new one presumptuous. The editor of this one seems to make an unnecessary display of learning in some parts of the introduction. His discussion of Sallust's peculiarities of style, however, is excellent. The notes give hardly enough help—a criticism which will seem to many like praise. The vocabulary, like all in the series, is carefully prepared. The illustrations do not strike us as either artistic or specially relevant. They are rather a blemish on the book.

Outlines of the History of Ethics for English Readers. By Henry Sidgwick, Knightbridge Professor of Moral Philosophy in the University of Cambridge, and author of "The Methods of Ethics." London: Macmillan & Co. 1886.

The substance of this book is already familiar to us in the article on *Ethics* in the Encyclopædia Britannica. The handiness of this volume, however, its fair, clear page and beautiful typography, make

it a welcome addition to the *Manuals for Students*. Much of the original article has been rewritten and considerable additions have been made, materially increasing its value. The author purposely omits to give adequate consideration to the German and French schools, confining himself to Greek and Graeco-Roman ethics, Christianity and Mediæval ethics, and modern English, including Scotch, ethics. Hebrew ethics and the modern French and German schools are touched upon only as in a general way affecting these. The general perspective of the book, with the above omission, is excellent. It is difficult for a teacher of moral philosophy to write the history of ethics without betraying his own bias and making clear to his readers what his own views are, but Mr. Sidgwick has succeeded to a remarkable degree. The book is as simple as the limitations of the subject admit of its being. The style is clear and easy. The page seems to us disfigured occasionally by needless quotation marks around certain words or expressions, but as a hand book for the student who wants to get in brief space and compact form a just idea of the growth of ethical study, it has no equal.

American Statesmen edited by John T. Morse, Jr.

Samuel Adams, by James K. Hosmer, Professor in Washington University, St. Louis, Mo. *

Alexander Hamilton, by Henry Cabot Lodge.

John Adams, by John T. Morse, Jr.

Daniel Webster, by Henry Cabot Lodge.

Thomas Jefferson, by John T. Morse, Jr. Boston: Houghton, Mifflin & Co.

These books are offered by the publishers as a course of reading for boys and girls in secondary schools. They present, in a pleasing form, a series of lives of important men intimately connected with the history of our country. The narratives are interesting, and though perhaps in part too mature for many students, their value can hardly be exaggerated when we remember that all the evils which threaten our government at the present time, may be averted by a careful study of the past. As studies of civics in a concrete and interesting form, they deserve the notice of every teacher. Their estimate of the characteristic excellencies and defects of the men about whom they are written is eminently fair and impartial. They are written without adulation by men specially fitted for the work, who have devoted much time to their preparation.

Greek Lessons Prepared to accompany the Grammar of Hadley and Allen, by Robert P. Keep. New York: D. Appleton & Co. 1886.

Whoever attempts to prepare a beginner's Greek book must of course expect to have his work judged by the standard of White's First Lessons in Greek, the best elementary work yet produced in the classic languages. Those who know Dr. Keep's record as a teacher

and writer will not deem him foolhardy in attempting to enter a field so well covered. His book is on the whole easier than White's Lessons, and this fact will commend it to many teachers, for the difficulties in the way at the beginning of the study form no small bar to the popularity of Greek.

The consonant declension is deferred until Lesson 34, that is, until the pupil has learned the noun and adjective forms of the vowel declensions, all of the pronouns, and the present stem entire of $-\omega$ and $-\mu\iota$ verbs. The $-\omega$ and $-\mu\iota$ forms are all taken side by side and carefully compared as the pupil proceeds. Both these features are excellent. In the analysis of the verb form the variable vowel is considered a part of the stem, while the simple stem is called theme. The treatment of the different tense stems and the derivation of the present stem from the theme is not begun until Lesson 51 is reached. In harmony with the method previously pursued the 2d aorists of $-\omega$ and $-\mu\iota$ verbs are given together.

The vocabulary is not so extensive as White's, nor do the exercises appear to exhibit so great a variety of style and construction. Many of the sentences are taken from the New Testament and the Septuagint, and some were composed for the work. The exercises generally have a "cut and dried" appearance, and while excellent for drill work in the forms, are not so well adapted for teaching the idiom of the language. The thirteen exercises at the end of the book, however, are excellent. The text of these lessons, taken from the first pages of the Anabasis, serves as the basis for exercises in recomposition, which not only are useful in themselves, but will be suggestive to most teachers. The whole book will commend itself to those who are seeking an easy elementary work in Greek.

Select Orations of Cicero, chronologically arranged, covering the entire period of his public life. Edited by J. H. and W. F. Allen, and J. B. Greenough. Revised and illustrated edition, with a special vocabulary prepared by Professor Greenough. Boston: Ginn & Company. 1886.

The right which this edition has to be called illustrated rests on an engraving of the Uffizi bust of Cicero, a view of the Roman forum in 1885, and a plan of the ancient forum compiled from Middleton's Ancient Rome (1885).

The 250 pages of text are printed from the same plates and are consequently identical with the former edition issued without vocabulary. The notes have been re-cast with changes greatly improving their appearance and also fitting them better for school work. It is hard to pass judgment on a vocabulary without a long acquaintance, but a cursory examination of this one reveals no defects, the form is attractive, and it seems to have been made carefully and with a good knowledge of actual needs. As in the Cæsar of the same series, the perfect participle is given for the fourth form in the principal parts of verbs instead of the supine in $-um$. The book is uniform with the Vergil and Cæsar, is well bound, well printed, and fair to look upon.

THE ACADEMY:

A JOURNAL OF SECONDARY EDUCATION.

DEVOTED TO THE INTERESTS OF HIGH SCHOOLS, ACADEMIES AND ACADEMIC
DEPARTMENTS.

GEORGE A. BACON, . . . MANAGING EDITOR.

VOL. I. NOVEMBER, 1886. NO. 8.

*UNDER WHAT CONDITIONS MIGHT ADMISSION TO
COLLEGE BY CERTIFICATE BE PERMITTED?**

PRINCIPAL ROBERT PORTER KEEP, PH. D., NORWICH (CONN.) FREE
ACADEMY.

The wording of this question implies that there are conditions under which admission to college by certificate is possible and desirable. The evident care with which the inquiry is phrased also suggests that these conditions are not easy to determine. No discussion of the problem can be complete, can be suited to such a gathering as this, which does not touch upon the general relation of college to school to a degree which at first thought might seem uncalled for. This topic indeed, like the other topics which we have considered, is simply a phase of the large question of the relation of college and secondary school, and it claims discussion and settlement on that ground. It may well be that the thoughts and suggestions which I may express have been anticipated by more distinguished authorities on other occasions. I shall hope to do little more than start discussion, and may perhaps only maintain positions for others

* This paper was read at a meeting of representatives of Colleges and Preparatory Schools of New England, October 17, 1885. It is printed here at the request of numerous readers of *THE ACADEMY*, and seems specially timely in view of the effort now on foot to bring the colleges and secondary schools of New York into closer relation and to secure more uniform requirements for admission to college.—
[Ed.]

to refute. To completeness of treatment, or even to a carefully logical arrangement of topics, I shall be able to lay no claim.

I remark in the first place that if the question were approached from the standpoint of personal preference and submitted to the better teachers of our classical schools, they would, in my judgment, not be generally desirous of the privilege of passing their scholars into college upon certificates issued by themselves. The contact of the teacher of the preparatory school is intimate during the three or four years of the school course, and he becomes so completely acquainted with the character, mental habits, home surroundings, of his scholars, that he feels himself in a measure disqualified from passing absolute judgment upon the amount and quality of their acquisitions. Many teachers also feel that, at the important break in a course of education which occurs between school and college, it is *per se* desirable for the pupil to submit to that rigid and impartial scrutiny of the first half of his years of study which examination by the college authorities implies. If the expense attending such examinations, which often involves long journeys, is urged as an objection, the answer is given that they occur but once in a lifetime and that the long journey, in these days of local examinations, is not absolutely required. If the unfairness of protracted examinations, held at the hottest season of the year, in unfamiliar surroundings, and conducted by examiners whose reputation and acquirements impress the applicant with overmastering awe and dread be referred to, the rejoinder may be made that, if the pupil has been fairly attentive to his studies during the ordinary period of a full preparatory course, he will certainly have gained a preparation which fatigue, excitement and surroundings cannot destroy.

The pupil should, it is properly urged, be led to aim at a thoroughness of preparation which shall much exceed the ordinary requisitions for entrance at college, and shall leave an abundant margin to cover the consequences of excitement, embarrassment and fatigue. The ordeal, in short, is one of those ordeals which the successive generations of educated men have passed through without injury, and which is likely to harm the children as little as it has harmed the fathers.

So much for what I will call the instinctive attitude of our best teachers toward the question.

I next remark that the instinctive attitude of our best teachers toward the certificate system might seem to be justified by the experience of our New England colleges which have employed this system. A plan of admission on certificate, with some slight scrutiny of the schools enjoying the right, has been followed for ten or twelve

years by Dartmouth, Williams and Amherst colleges, to mention no others. There is reason to believe that the faculties of these colleges named are not well satisfied with the results of the plan.

It now remains to inquire what better system can be devised, and in prosecuting this inquiry, I shall first examine the most carefully planned, extensively applied and longest standing experiment of admission on principal's certificate or graduate's diploma which exists in our country. The plan to which I refer originates with a university, fruitful in what is new and fruitful in what is good ; in a university which, with justice, and not without a certain pride, claims as its own some of the more radical changes in the theory and practice of higher education which the last twenty years have witnessed. I refer to the University of Michigan. Here there has been in operation for thirteen years a plan, originally devised by the able and scholarly Professor Frieze, and wholly approved by President Angell and Professor (now President)* C. K. Adams, which may be briefly sketched as follows :—

In 1872 a circular letter was sent to the high schools of Michigan inviting them to apply to the university authorities for the privilege of sending their graduates thither without examination. The next step on the part of the university was to send a committee to examine and report upon the condition of the schools which signified their desire for the right of certificate. This committee ordinarily consisted of two members and was representative of the classical and scientific courses of the university. If its report was favorable, the permission was granted, subject, however, to recall in the case of any school the work of the graduates which should be found unsatisfactory after their admission to college. In one case only (in thirteen years) has the privilege once granted been recalled, and its recall led in that case to an immediate and complete reorganization of the school. The possession of the right of certificate is now regarded as a privilege and an honor by the high schools of Michigan. Not to possess, or to be deprived of, this privilege is felt to be a reproach to a locality and to demand explanation.

At the present time eighteen of the high schools and several boarding schools and academies of Michigan are privileged to send their graduates into the university without examination. Of these eighteen high schools, eleven have full courses, *i. e.*, Greek is taught in eleven; in the remaining seven, the diploma, or principal's certificate, carries with it admission in the subjects pursued in the school curriculum. A very important, perhaps the most valuable, feature of the plan

* Since this was written, Mr. Adams has accepted the presidency of Cornell University.

through these fourteen years, has been the frequent visits of inspection, generally not less often than once a year, of a committee from the faculty to each school upon the list. These visits have become so fully recognized as a part of the plan that the expenses of the visiting committee are in each case paid from the State appropriation for the high school visited. It is easy to see how naturally the committee of inspection may become also a board of advice, and how often its counsel may be sought and followed in regard to the selection of teachers, and in all matters relative to methods of study and arrangement of the course. No doubt the labor and thought which the faculty of the university has chosen to expend in devising and perfecting this plan, and the personal sacrifice of time and comfort which such members of the faculty as President Adams and Professor D'Ooge have made in service upon the visiting committees have had their abundant reward in immensely strengthening the hold of the university upon the secondary schools of the State. At present, nine of the principals of the eleven high schools having right of certificate are Ann Arbor graduates, and about sixty of each freshman class, or about 50 per cent. of the whole number, are admitted to the college on certificate.

I remark in reference to the plan thus briefly outlined :—

First—It transfers the examination, in part, at least, from the scholar to his school and his teachers, and from a single day or the two days before entrance to college to the period after admission. I am informed that careful comparative records have been kept of the quality of college work performed by students received on certificate and by those received after examination, and that the result of the comparison is favorable to those admitted on certificate.

Second—The putting of school and teachers on examination and holding them, up to a certain point, responsible for the college work of their graduates, lays an emphasis on *staying power*, that most important of qualities in young men. It allows character and presumable capacity for growth to receive weight as truly as actual, present acquisition, which last may depend wholly on "cram," and may be a very imperfect criterion of a pupil's fitness to grapple with advanced study.

Third—The plan described recognizes on the part of the university the right and the duty of actively concerning itself with the condition of its immediate feeders, the secondary schools.

Our consideration of the subject, thus far carried, has yielded the following negative conclusions: (1) The best teachers are generally disinclined to pass their pupils into college on their own certificate, if the giving of such certificate implies no special familiarity on the

part of the college granting it with the methods and courses of study in the school to which it is granted ; (2) the plan of admission on certificate granted by New England colleges independently of each other and without supervision of schools pursuing the right to confer it, has yielded unsatisfactory results, as tested by an experience of ten to fifteen years in Amherst, Williams, and Dartmouth colleges. I further add : (3) An inspection of schools prior to the granting the right of certificate and maintained, at intervals, subsequently, that it may be known whether the privilege should be continued, would, if undertaken by individual colleges separately, impose too great a burden upon faculties already overtaxed ; would also, if otherwise possible, be of questionable propriety, as causing suspicions of interference and of self-interest. Similar objections would seem also to be valid against the plan already adopted by some of our colleges of holding local examinations at the larger schools. This plan implies a certain going after students and even a competition for them, of which even the appearance would be better avoided.

It is for us now to consider how far the plan in force in the University of Michigan escapes the objections just enumerated, and to what extent it may be helpful in devising a scheme which should be applicable to our New England colleges. Would it not appear that at least two features of any successful plan must be concert of action on the part of several colleges and an accurate knowledge, obtained by visitation of experts, of the condition, courses and methods of each school upon which the privilege would be conferred ?

I have been led to think that a solution of the problem may be found in the constitution by six or eight of our New England colleges of an examining or inspecting board, to which should be referred the whole matter of conferring upon schools desiring this privilege the right of sending their graduates without examination to any one of the colleges associated in the plan. Such a board would be organized with a view to operations continuous through a course of years ; would, of course, be representative of all the coöperating colleges, and would publish its annual report. It might consist partly of members of the faculties of the colleges, and partly of graduates who had made teaching their profession, and who had gained authority in their calling. From the moment of its organization it would command the highest respect, for it would have the advantage of other examining boards in ability of membership, in permanence of organization and in definiteness of work. Its duties would be at the outset light, for not many schools would at first apply for inspection, and then visits of inspection would be best performed by small committees of two or three, into which the whole board would easily be

broken. A week's time would probably cover the interruption of college work which service on the board would entail, during the first year or two of its operation, upon college officers. No doubt the visit of so competent a tribunal would at first be somewhat dreaded, even by our best schools, but real ability and eminence are always unaffectedly modest, and the master of a subject is most ready to admit that many different ways and different methods may lead to a common goal, so that I can not doubt that, after the first experience, the teachers of secondary schools would not only fully appreciate the sympathy and interest which had led specialists of eminence to examine the work of their class rooms, but would also recognize the astonishing impulse which the visit of the examiners had given to themselves and to their pupils. I have recently had knowledge of a case in point. In one of our largest and best New England academies, public oral examinations, for one cause or another, had been abandoned so that one had not been held for ten years. During the last year a board of eight or ten examiners, all of proved competence, was brought together and attended the closing examinations of the school at the end of the winter term. The impression made by this visit was great, and the improvement in the results of school work for the remainder of the year was estimated at not less than twenty-five per cent. And this was the result of examination by a board hastily gotten together, composed of men unacquainted with one another, and disbanded as soon as its one day's duty was performed. The benefit to be derived from the visits of the joint college board which we are now considering, would only appear in its fulness as time passed on. Its visits would preferably come in the midst of a term, and its small committee would attract little notice until its work was almost done. It would regard counsel and suggestion as much a part of its duty as scrutiny. School visitation and school examination are truly arts, and these arts the board, commencing with but small acquaintance with the special difficulties of the teachers in the secondary schools, would gradually and surely acquire. To the teachers of the preparatory schools, closely confined by long school hours, so that teachers in the same school scarcely see each other except, perhaps, at the few moments of common morning devotions, debarred by coincident vacations and holidays from the opportunity of visiting other schools or colleges, the visit of the college inspecting board would be an inestimable boon. It would open to them a wider horizon; would set clearly before them the type of scholarship and of mental training most valued in the college; would put upon self-defence inherited, stereotyped ways of teaching, which had insensibly become purely mechanical. The mere fact of the

visit, involving sacrifice of time and interruption of special studies, would give evidence that what is often said of the importance of the work of the academy teacher is no mere lightly uttered commonplace, but deeply felt and true.

Two or three practical difficulties in the way of the execution of such a plan as has been outlined must now be fairly considered. In the first place, it will be natural to say that any such protectorate of secondary schools as is exercised by the University of Michigan would be impossible in New England. That university, we shall be reminded, is a State institution, at the apex of the State public school system, and in the closest organic relation to the school of the grade immediately below it. Besides this, its size and the eminence of its professors give it peculiar authority in the State and throughout the West. It undertook the supervision of the secondary schools of Michigan under peculiarly favorable circumstances, to which New England can furnish no parallel. I am well aware of the force of this objection, which I have no desire to deny or to understate. I should simply urge that such a scheme as has been outlined would have in two respects greater advantages in New England than in Michigan, (1) in the existence of at least half a dozen preparatory schools which are incontestably superior to any in the State of Michigan, and clearly deserving the privilege of certificate; and (2) in the impossibility of charging interested motives upon a supervision entered into jointly by institutions of the standing of our best New England colleges. But I should urge the trial of the plan upon ground lying far back of considerations of special facility or difficulty. If the policy and effort of Michigan University springs from a right view of the relation of the college to the school, then the older, wiser, riper colleges of New England should find ways of initiating a similar protection and supervision.

The second practical difficulty appears to be the difference in the requisitions exacted by the leading New England colleges. This difficulty does not seem to me to involve a fatal, or even a very serious, objection to the plan. For the sake of avoiding all complications, it might be understood that the graduates of schools which had been approved by the examining board should be admitted to any one of the associated colleges in what I will call minimum requisitions. These would include arithmetic, algebra (to logarithms), plane geometry, Latin and Greek grammar, easy Latin and Greek composition, three books of Cæsar, six orations of Cicero, six books of the Æneid, three books of the Anabasis, two books of Homer, the histories of Greece and of Rome. The elements of one modern language might or might not be added. All colleges of the first

rank exact as much as this, and any student who has thoroughly done this work is ripe for admission to any New England college, though the formal requisitions may include other topics. Any slight excess above the minimum requisition the student would find it no serious burden to make up at the commencement of his freshman year.

Perhaps a third objection which will be raised against the plan would be the interruption of college work and of special studies which service on an examining board would involve. But it has already been shown that the constitution of the board would be such as to make the smallest possible demands upon the representatives of each associate college, and it may be furthermore added that the college professor might gain, as well as confer, a benefit by such service. I am far from undervaluing the need of eminent learning in the college professor. But he will not be fully equipped for his position if he is nothing more than a specialist. His position, according to New England tradition, is, in a certain sense, a public one, in which he must represent his college in various relations, and he may not be indifferent to any effort which intimately concerns the cause of higher education. I trust that I shall not have seemed presumptuous because I have attempted to give some definite outlines of a plan under which admission to college on certificate might be allowed. I throw the responsibility upon those who set me to maintain a certain thesis. The method which I have followed has been the simple one of examining the experiments hitherto made, with the hope of finding the lessons which they teach. And it has seemed to me that experience shows that if the right of certificate is to have any value, so that first class schools shall be willing to assume the responsibilities which attend it, it must be conferred after a thorough inspection. It has also seemed to me clear that no such inspection can be exercised in New England unless by representatives of a number of associated colleges. Of course it is easy to say *cui bono* to this or any other untried plan. I ask for it only what I am sure that it will receive, a fair consideration upon its merits. It must be distinctly understood that the participation of the schools in such a plan would be wholly voluntary. The great majority of schools would doubtless stand aloof, feeling that they had little to gain from such a scrutiny and not caring to submit their methods to it. But if the plan were once inaugurated and half a dozen of the best schools, having sustained the ordeal, began to derive manifest advantages from the visits of the examining board, a moral pressure would be exerted upon other schools which they would find it difficult to refuse to follow.

I believe that impulse toward educational progress must be expected from above. Teachers' conventions, though not unproductive of good results, are not fruitful in new ideas. There is too much threshing of grain that has already been well threshed. Our educational publications, however laudable their aim, labor under the same defect; they do not abound in new ideas. The secondary teachers need contact with the specialist, with the master of his craft. The privilege of such contact, the impulse of such acquaintance, this conference has for the first time in the history of education in America opened to preparatory teachers. We rejoice in the evidence which we have seen that the colleges are as desirous to give as the schools are ready to receive both impulse and guidance. We deeply desire that the interest now evoked may speedily find definite and permanent channels through which it may penetrate and enliven all our work.

NOTES ON GERMAN SCHOOLS.

BY PROFESSOR JAMES M. GARNETT, UNIVERSITY OF VIRGINIA.

INTRODUCTION.

In order to render more intelligible to the reader the following Notes on German Schools, a brief account of the organization of these schools is prefixed. The reader of *THE ACADEMY* has already been made acquainted with the educational system of Germany in the excellent address of President C. K. Adams, of Cornell University, published in the number for March, 1886; but it is necessary for my present purpose to give more detail in respect to the arrangement of classes and subjects of instruction in the *Gymnasien* and *Realschulen* than was possible in a general address. The *Gymnasien* have been often studied and discussed, and while they are now undergoing a hot fire from the reformers, they present to American teachers examples of very thorough and excellent instruction in certain directions, and it is not necessary for one to be a "teuto-maniac" (see *THE ACADEMY* for June, 1886, page 174), in order to appreciate at their proper value their courses and methods of instruction, as described in these notes taken on the spot.

The great repertory for information on the subject of German schools is Dr. L. Wiese's *Verordnungen und Gesetze für die höheren Schulen in Preussen*, published in two volumes of 414 pages each, in

1867-'68, the first on "The School," and the second on "The Office of Teacher and the Teachers."

Dr. Wiese was that counsellor in the royal Ministry of Public Instruction, who had special charge of all matters connected with higher schools, under which designation are included *Gymnasia*, *Pro-gymnasia*, *Realschulen* of the first and of the second rank, higher municipal schools (*Bürgerschulen*), and higher female schools. He was, therefore, eminently qualified from position and knowledge to prepare such a work, and the brief criticism, I think, that a foreign reader would make upon it, is that it is too full; one has to read too much in order to "get at" what he wants.

The ordinance of the Ministry which regulated the course of instruction in the *Gymnasia* was issued October 24, 1837, and that for the *Realschulen*, October 6, 1859, but there are regulations of 1870, and of 1882, which modify these to some extent, of which, however, I have, unfortunately, no copy.

The complete *Gymnasium* contains six classes, nominally from *sexta*, the lowest, to *prima*, the highest, but *prima*, *secunda*, and often *tertia*, have two divisions, an upper and a lower, the course in each of which occupies a full year, so that the whole course covers a period of eight or nine years. Those *Gymnasia* that are exclusively boarding-schools, of which there are very few in the kingdom, as the noted *Schulpforte*, begin with *quarta*, or *tertia*. The *Pro-gymnasium* contains the classes from *sexta* to *secunda* inclusive, though some do not go beyond *tertia* or even *quarta*. The complete *Realschule*, like the *Gymnasium*, contains also six classes, with the same divisions. The higher *Bürgerschulen* have the five *Realschule* classes from *sexta* to *secunda*, though some exist with fewer classes. Many higher schools have preparatory schools (*Vorschulen*), of two or more classes, connected with them, which furnish the preparation for *sexta*.

Into these schools children are received without any previous knowledge, but usually not before the completion of their sixth year. Children do not enter *sexta* before the completion of their ninth year, and are required to possess fluency in reading German and Latin text, knowledge of the parts of speech, a readable and neat handwriting, readiness in copying dictation without gross mistakes in spelling, accuracy in the four fundamental rules of arithmetic for whole numbers, and an acquaintance with the histories of the Old and New Testaments. (Wiese I, page 25).

The following are the courses of instruction for the complete *Gymnasium* and *Realschule*, which are prescribed by the Ministry of Public Instruction in Prussia, and they are nearly the same for the other German States. These tables are taken from Painter's "His-

tory of Education," (page 294), published during the present year, and are, therefore, later than those given in Wiese. They vary chiefly in giving a little less time to Latin in the Gymnasia, and more in the *Realschulen*, than formerly, and in beginning Greek in *tertia*, instead of *quarta*, the time gained in *quarta* being distributed, chiefly to French and Natural History:

COURSE OF INSTRUCTION (*Lehrplan*) FOR THE GYMNASIA.

STUDIES.	Sexta.	Quinta.	Quarta.	Unter-Tertia.	Ober-Tertia.	Unter-Secunda.	Ober-Secunda.	Unter-Prima.	Ober-Prima.	Total.
Religion.....	3	2	2	2	2	2	2	2	2	19
German.....	3	2	2	2	2	2	2	3	3	21
Latin.....	9	9	9	9	9	8	8	8	8	77
Greek.....	..	..	..	7	7	7	7	6	6	40
French.....	..	4	5	2	2	2	2	2	2	21
History and Geography.....	3	3	4	3	3	3	3	3	3	28
Mathematics.....	4	4	4	3	3	4	4	4	4	34
Natural History.....	2	2	2	2	2	..	..	..	..	10
Physics.....	..	..	..	..	..	2	2	2	2	8
Writing.....	2	2	..	..	..	..	..	..	..	4
Drawing.....	2	2	2	..	..	..	..	..	..	6
Hours per week.....	28	30	30	30	30	30	30	30	30	..

COURSE OF INSTRUCTION FOR THE REALSCHULEN.

Religion.....	3	2	2	2	2	2	2	2	2	19
German.....	3	3	3	3	3	3	3	3	3	27
Latin.....	8	7	7	6	6	5	5	5	5	54
English.....	..	..	..	4	4	3	3	3	3	20
French.....	..	5	5	4	4	4	4	4	4	34
History and Geography.....	3	3	4	4	4	3	3	3	3	30
Mathematics.....	5	4	5	5	5	5	5	5	5	44
Natural History.....	2	2	2	2	2	2	..	..	..	12
Physics.....	..	..	..	..	..	3	3	3	3	12
Chemistry.....	..	..	..	..	..	..	2	2	2	6
Writing.....	2	2	..	..	..	..	..	..	..	4
Drawing.....	2	2	2	2	2	2	2	2	2	18
Hours per week.....	28	30	30	32	32	32	32	32	32	..

It will be observed that the *Realschule* differs from the Gymnasium chiefly in teaching no Greek, in giving less time to Latin, and more to French, mathematics, the natural sciences and drawing, and in adding English to its course of study. Singing and gymnastics are taught in both kinds of schools out of the regular school-hours, which are from eight to twelve, and from two to four o'clock, and in the Gymnasium Hebrew also is taught to future students of theology. Where the bifurcation system exists, as is the case in some institutions, the separation begins after *quinta*.

Lack of space forbids any notice of the special courses of study in the different subjects, which are given in full in Wiese (I., pages 51-73).

For the sake of comparison with our own schools and colleges, it will suffice to state the amount of Latin and Greek read in the whole course of the Joachimsthalches Gymnasium in Berlin, given in Wiese (I., page 76) as a specimen: of *Nepos*, most of the lives; *Cæsar*, the Gallic War entire, or at least five books; *Livy*, three books; *Tacitus*, Annals, about two books, besides the Germania and Agricola; *Cicero*, three shorter and three longer orations, Laelius, Cato Major, Tusculan Disputations (books I and IV), De Officiis (selection), and one of the rhetorical writings; of *Ovid*, about one thousand verses; *Virgil*, six books; *Horace*, the Odes, some Epodes (2, 13, 16), the Epistles (at least 1 and 2), and the Satires (I, 1, 6, 9); and a selection from the *Elegiac* poets. Of *Xenophon* was read the Anabasis entire, or at least five books, and selections from the Memorabilia and the Hellenica; *Herodotus*, eighty to one hundred chapters; *Thucydides*, one book (and at least I, 35-46); *Lysias*, six orations; *Demosthenes*, three orations; *Plato*, Apologia, Crito, Phaedo (narrative part) and Protagoras; of *Homer*, Iliad and Odyssey, with help of the private reading, entire; *Sophocles*, two tragedies. It may be added that *Sallust* is one of the prescribed authors, and teachers are at liberty to make selections from *Justin*, *Curtius*, *Quintilian*, *Pliny*, *Seneca*, *Phaedrus*, *Plautus*, *Terence*, *Lucan*, in Latin, and from *Plutarch*, *Isocrates*, *Lucian*, *Aeschylus*, *Euripides*, and the *Lyric* and *Elegiac* poets in Greek. As to the spirit in which instruction in the higher classes must be given, the following quotation from the ministerial regulation of June 24, 1864, will suffice (Wiese I, 76) :

"The training of the upper gymnasium classes in philological instruction is misunderstood or forgotten, if the chief care of the teacher is directed to grammatical discussions, and if, on this account, a real introduction to the spirit of the ancient authors, only to be obtained by comprehensive reading, is missed. The requirement of strict grammatical interpretation by no means makes it necessary that what is intended as a means should be made the end." How often do we fail just here, and how few of our college graduates leave college with "a real introduction to the spirit of the ancient authors!" Hence the outcry against Latin and Greek because it produces so little fruit, many of our professors seeming to regard the Latin and Greek authors as existing for the purpose of giving grammatical instruction to nineteenth century Americans. The Prussian regulation is right; the knowledge desired can be obtained "only by comprehensive reading," and our classical teachers would do well to lay it to heart, or they will "go to the wall."

But while the German Gymnasia do give excellent instruction in the classics, in history and geography, and in the vernacular, they do not give as much attention as our schools to higher mathematics. The highest classes do not study higher mathematics than Plane and Solid Geometry and Plane Trigonometry, and in Algebra Quadratic Equations, Permutations and Combinations, Series, Logarithms, Applications of Algebra to Geometry, Indeterminate Equations, and the Binomial Theorem. The subject is looked upon with aversion by students of the Gymnasia, and they generally know very little about it. It is, however, carried much further in the *Realschulen*, Spherical Trigonometry, Analytical and Descriptive Geometry, and the solution of Equations of the higher degrees, being taught. Great stress is laid upon the application of the mathematics learned in both kinds of schools, and the *Abiturienten Prüfung* (leaving-examination) always contains questions involving the practical application of the student's knowledge of mathematics.

This examination is held at Easter and Michaelmas, the close of the two semesters (half-years) respectively, into which the school-year is divided. It will be found fully described at the close of these notes. Suffice it to say now, that the schools hold the examinations for entrance to the universities, and no student is admitted to matriculation in the universities without the *Zeugniss der Reife* (certificate of ripeness) from the Gymnasium or the *Realschule*, which certifies to his having satisfactorily passed this examination, and for certain careers the certificate from the Gymnasium alone is still necessary, although changes in this respect were made in 1870, and further changes are now agitated. The universities hold no examinations but for the degree of Doctor of Philosophy, and the State holds examinations for admission to all professions, that of teacher included, and all occupations in church or State for which university studies are required. It has been the object of the writer in these "Notes" to give a plain description of what passed under his eyes in the several class-rooms visited; they were written for his own satisfaction, without intention of publication, but have been placed at the service of the Editor of THE ACADEMY, who thinks they may be helpful to American teachers.

I.

The following "Notes on German Schools" were made after visits to certain Gymnasia and *Realschulen* in Berlin and Leipzig some years ago, and chiefly to the Friedrich Wilhelms Gymnasium in Berlin, one of the largest in the city, then in charge of Director F. Ranke, brother of the distinguished historian, Leopold von Ranke,

recently deceased. Connected with this Gymnasium were a *Realschule*, a *Töchtereschule*, or female school, and a *Vorschule*, or preparatory school for the Gymnasium. I was at the time living in the family of *Oberlehrer* Martiny, and every facility was afforded me by both Director Ranke and himself, for accomplishing my purpose of becoming acquainted with the inner working of the German secondary schools by personal observation, which is more serviceable to a practical teacher than any amount of reading about schools. Before going to Germany I had read carefully Mr. Matthew Arnold's report on "Schools and Universities on the Continent" (1868) and after, several months residence in Berlin, I had familiarized myself with the organization of the German schools by the study of Wiese's "*Verordnungen und Gesetze für die höheren Schulen in Preussen*," (see above) and the examination of programs of different Gymnasia. The results of my personal observation and the impressions made at the time are now offered for the information of the readers of THE ACADEMY.

"On Friday Director Ranke, of the Friedrich Wilhelms Gymnasium, sent me a *Stunden-plan* (scheme of recitations), and I copied as much as I thought would serve my purpose. Monday morning I went with "mine host," *Oberlehrer* Martiny, and was at the Gymnasium by eight o'clock. I first accompanied him to his class-room, where the roll was called by one of the boys, and then all went to the chapel, where the regular Monday's service (*Andacht*) of the whole school together was held, consisting of singing, reading the Scriptures, and prayer,—the singing being accompanied by music. The Director was present and stood up very reverently in the central aisle during the ten or fifteen minutes of the service, while it was conducted by one of the teachers. From the chapel I went with M., and heard a *Religion-Stunde* from him in *Unter-Tertia* I. It consisted of repetition from memory of certain portions of Luther's catechism, and the explanation of certain portions, particularly those relating to the Lord's Supper, the statement of different methods of proof of the existence of God, but without their explanation, and the citation of those passages of the Old Testament where the angel of God speaks as God Himself, believed to point to the Messiah as this angel, e. g., the appearance in the bush to Moses, that to Gideon, and further, the citation of Ps. 110 : 4, and connected therewith the interview of Abraham with Melchizedek, referred to in the Epistle to the Hebrews, and of Ps. 110 : 1, referred to by our Saviour himself. The German benediction from the Psalms was also cited as an argument for the Trinity. The boys were seated in order according to their rank in the class, and were questioned at random, each boy rising to

answer, which custom was also observed in the other classes that I visited. If one boy "missed" the question, and another seated lower answered correctly, they immediately changed places, which did not, however, interfere with questioning other boys in the meantime. Few boys were unprepared, and not many questions were missed, but it seemed to be more of a "by heart" repetition than a real knowledge of what was handled in the class.

As there was no Latin *Stunde* in *Sexta* at nine o'clock, I visited *Quinta* II. and heard Dr. T. practice the boys on an *Extemporalium* that had been written from dictation the Monday before and corrected by the teacher. He gave me the one that had been written by the head of the class, which was without a mistake, to refer to. It consisted of simple sentences in which the principal constructions were the accusative with the infinitive and the ablative absolute, although uses of the subjunctive, e. g.; the indirect question, also occurred. It was more than a page in the quarto exercise-book, and to have been written in a half-hour, which I was told by Dr. T. was the time allowed, without a mistake, showed an excellent knowledge of the elementary rules and constructions for boys who had been studying Latin not quite two years. The words, I presume, as I learned afterwards was the case in *Sexta*, were given in corresponding sentences in the *Tirocinium* (the exercise-book used), after which these were modeled. I was particularly struck with the method of the teacher in practising the boys on the words contained in the exercise, requiring them to give *immediately* the Latin for the German of any part of the verb, and of many of its compounds and synonymous words, also to translate *immediately* other sentences formed at random from these words. If there was the slightest hesitation, the question was passed and the boy lost his place. I was surprised at the rapidity with which the boys answered, and the general correctness, and I could not fail to notice what an excellent exercise this was in training them to think quickly and to translate readily from German into Latin. The teacher was, however, too impetuous in boxing the jaws of boys who hesitated too long in their replies or answered incorrectly, which set the little fellows to crying, and he seemed to praise too much and even to fondle some who answered well, addressing the head as "*sehr gelehrte Müller*," and requiring him to give the translation, "*doctissime Müller*."(!)

The way in which he secured attention and stimulated thought deserved admiration, many by raising their hands (which was permitted in all the classes,) showing their eagerness to reply whenever one made the slightest hesitation. It was a *live* lesson and could not fail to train excellently.

Somewhat similar, though not quite so rapid, was the correction, or rather practice on, the *Extemporalium* in *Sexta* II., which I next heard from Herr H. He kindly gave me a copy of the *Tirocinium* to use, pointing out the exercise after which the *Extemporalium* had been modeled, and a copy of it written by the head of the class, which was here also without a mistake, though I noticed that his previous exercise had one mistake. The teacher, however, spoke very freely of the mistakes that had been made, strongly reprimanding ; the foot of the class for his *thirty-five* mistakes, and he remarked to me that between *eight* and *fifteen* was satisfactory and under *eight* good. He showed me the *Tagebuch* (day-book) in which the absences and "late" were entered, and the *Aufgabe-buch* (exercise-book) in which the *Pensa* (tasks) for the next day were written by the teachers and read to the class by its *Ordinarius*, besides having been previously announced by the respective teachers themselves. These *Tagebücher* are every evening looked over by the Director and signed with his initial ; they contain also a place for *Lob und Tadel* (praise and blame), but I believe these are not always filled out. This *Extemporalium* was on the third conjugation principally, the class having been studying Latin not quite a year, and was practiced on like the foregoing, though the teacher seemed to be of a milder disposition, frequently inquired whether the boys wished to ask any questions, and revised his corrections when he was convinced that he had made an oversight. Besides practice on the forms of the verbs, he required the boys to give the rules of gender for each word on which they were questioned, and afterwards he showed me the *Militia* from which these rules were learned in rime. These two books, the *Tirocinium* and the *Militia*, are the only ones used for Latin instruction in *Sexta* and *Quinta* in this Gymnasium, the first being an exercise-book from Latin into German, with a compendium of grammar and reading-lessons at the end, and the second an exercise-book from German into Latin, also with a compendium of German and reading-lessons, reminding me somewhat of Andrews' Latin Lessons. The two correspond to each other and are used together.

At eleven I heard *Sexta* I. under Herr S. This class having begun Latin at Michaelmas, the beginning of the present semester (half-year). Here was also the correction of an *Extemporalium*, very simple sentences with practice on the forms of the declensions, the verb *sum*, and the first conjugation alone, I think. I noticed that the adjective and substantive were always declined together, an excellent method. This teacher, however, did not impress me, as he was too slow and did not handle his class well, or

teach so as to "wake up mind." According to these *Extemporalia* principally the pupils are *versetzt* (transferred to the next higher class) at Michaelmas and at Easter; and I have now seen the way in which they are *durchgenommen* (taken through)."

THE HIGHER EDUCATION OF WOMEN.

Following the address of Dr. Withers-Moore, before the British Medical Association, which we commented upon in the October ACADEMY, comes an article in the *Fortnightly Review*, on the Higher Education of Women, written by Mrs. E. Lynn Linton. The article is conceived and written in a happy spirit and pleasant style by one who is rather practical than visionary and who has a good insight and a wide grasp. Indeed the frankness with which she puts some things, if it were used by a man, would lay him open to the charge of jealousy. At the outset she concedes the enforced celibacy of a large number of women from the simple fact that the women in England outnumber the men by over a million. In a large proportion of this number, self-support is not simply a desirable thing but an absolute necessity, and only by extending the lines of employment in which women may become self-supporting can the problem of self-support be satisfactorily solved.

At the same time she concedes two things not usually admitted in the discussion of this subject. The first is the same point advanced by Dr. Withers-Moore, that the waste of physical energy necessarily involved in the pursuit of Higher Education, to a degree necessarily unfits a woman properly to perform the functions of maternity, and with this comes the natural corollary that women whose ability and ambition prompt them to compete with men in directions where the Higher Education is a necessity, owe it, as a duty to society, to become celibate. The second point is that women are more disorganized because they are more individualized than men. To quote her own words: "Scarcely one among them takes into account the general good. Even in those questions where they have made themselves the leaders, individual victories are of greater value than general policy, and they would always subordinate the practical welfare of the majority to the sentimental rights of the minority. An individual sorrow moves them where the massed results of a general law leave them cold. This characteristic is perfectly sound and righteous in those to whom have been confided the care of the

family and the arrangement of details. Women ought to be individual, not for themselves but for others, and in that individualism there ought to be the injustice inseparable from devotion. An altruistic mother who would sacrifice her one child for the sake of her neighbor's two, does not exactly fulfill our ideas of maternal care; on the other hand, a mother who would rather her son was disgraced as a coward than that he should run the dangers of courage—or the partisan of her own sex who would sacrifice twenty men to save one woman inconvenience or displeasure, is as little fit to be the leader of large movements involving many and varied interests, as is that other to be a mother. In their own persons women carry out to a very remarkable degree this principle of individualism, the general good notwithstanding. Speak to an ordinary woman of the evil economic effects of her actions, and you speak a foreign language. She sees only the individual loss or gain of the transaction, and a public or social duty to creatures unknown and unseen does not count. In the cruel vicissitudes of fashion and the ruin of thousands brought about by simple change of material—in the selfish greed for bargains, no matter at whose cost obtained—in the complete ignoring of and indifference to all the results to others of her own example, a woman of the ordinary type is essentially individual and unsocial. In America—whence, however, we have received so many grand and noble impulses—this female individualism, with its corresponding indifference to the public good or to public duty, is even more pronounced than here; and the right of woman to her own development, though that should include what is called “the painless extinction of man,” is the very heart and soul of the new creed.

* * * * *

“It is impossible not to sympathize with a bright girl anxious to go on with her education, and petitioning for leave to study higher matters than have been taught her at her school. It is as impossible not to feel a sense of indignation at the injustice when parents say frankly, the education of their girls does not count with them; and, so long as they know how to read and write and can play the piano and are able to dance and perhaps to sew, there is nothing more necessary. We do battle then for the right of the individual to know, to learn, to perfect itself to the utmost of its ability, irrespective of sex. But if we are wise we stop short of such strain as would hurt the health and damage the reproductive energies, if marriage is to come into one of the chances of the future. A girl is something more than an individual; she is the potential mother of a race; and the last is greater and more important than the first.

Let her learn by all means. Let her store her mind and add to her knowledge, but always with quietness and self-control—always under restrictions bounded by her sex and its future possible function. Or, if she disregards these restrictions, and goes in for competitive examinations, with their exhausting strain and feverish excitement—if she takes up a profession where she will have to compete with men and suffer all the pain and anxiety of the unequal struggle—let her then dedicate herself from the beginning as the Vestal of Knowledge, and forego the exercise of that function the perfection of which her own self-improvement has destroyed. We cannot combine opposites nor reconcile conflicting conditions. If the mental strain consequent on this higher education does waste the physical energies and if the gain of the individual is loss to the race, then must that gain be sacrificed or isolated.”

These would be bold words for any man to utter. Coming from a woman and spoken with reference to her own sex, they are worthy of serious thought, the more so as her whole discussion of the question indicates a wide grasp of the subject and an understanding of conditions and limitations, both individual and social, such as we rarely find in any writer on the subject. We recommend the whole article to the attention of our readers. The more so, as she brings against us all a charge to which we believe the present generation is more open than any preceding one has been, namely, that we are inclined to think more of our rights than our duties. “We preach the doctrine of rights everywhere, that of duties straggles in where it can.” We sincerely believe that this is too often the case. It is so much easier to struggle for the rights we see possessed by others than to perform the duties easily within our reach.

COMMUNICATIONS.

To the Editor of THE ACADEMY :

*Dear Sir :—*All teachers know that examinations for the most part subserve one purpose only, to degrade a certain class of pupils against whom a ban cannot be proclaimed *ex cathedra*. The absurdity of an examination of a couple of hours at the end of the term, or with the reënforcement of monthly tests meanwhile, to show a pupil's proficiency, is not only absurd ; it is grotesque. It may be fairly said that an instructor who does not know whether his pupils ought to be promoted, from his daily examination of them, has not

learned the first rudiments of his trade, and is unfit for his place. And one who will, as some do, pass a pupil at a lower figure because of a partial miss in an examination, when a term's work has been highly satisfactory, is at the summit of pedagogic unrighteousness. But it is often impossible to waive the rules requiring this superficial test. Superficial it is, as Huxley somewhere says in speaking of the amazing quantity of foolscap he had at various times destroyed in pouring out "knowledge" at examinations.

Not being under this durance, two years ago I determined to try the experiment of saying to one of my younger classes that no examinations whatever would be held, provided two or three simple requirements were met by them, but, instead, I should pass them up or down in accordance with the character of the work done from day to day, the infrequency of absences, etc. The plan worked like a charm for a time. It ought to be said that two or three things conspire to make a success of such an endeavor. In the first place an instructor must have an unequivocal reputation for fairness toward students whether they suit his notions of perfection or not; and, secondly, a disposition among students to do square, honest work must be generally prevalent among the members of a class.

The order was suspended temporarily because of the infraction, for a few weeks, by a part of the class, of a rule that no one was to use dictionaries without my consent. The study is Greek. During the terms the plan was in force, I bear unqualified testimony to the unusual character of the work done by the pupils. Some ten years of instruction has not brought me in contact with such painstaking, comprehensive, self-reliant work as was done by these students. They suffered, during part of last year, the penalty of their misdoings, but a willingness to comply with such rules for their work as I choose to lay down for this coming year will restore their day of grace.

The same plan was tried with the following class with no less conspicuous results. So thoroughly convinced am I that manliness of feeling, and a healthy independence in the way they get at their work will follow the introduction of this regulation, that I shall again try it with an incoming class. The sole objection to the plan, so far as I can see, is that you are bothered somewhat with the doleful laments of those who are not at work with you. But this is endurable.

CHARLES M. MOSS.

INTERCHANGE.

Communications upon any inside school topic may be addressed to G. R. CUTTING, AUBURN, N. Y. The subject for December will be : "The Natural Method of Teaching Modern Languages."

The *Interchange* correspondence relative to the methods of teaching modern languages develops at least one fact : that the subject is now attracting great attention in the secondary and higher schools. The present *Interchange* includes contributions from the pioneers and best exponents of the so-called "Natural Method" ; and opinions and statements of methods from some of the leading educators who do not use this method exclusively. The December *Interchange* will contain contributions on the same subject from other leading teachers of experience. *Interchange* will continue to be an open field for such presentations of inside school methods. We believe that every contribution of the present series on teaching modern languages will be suggestive, helpful, and practical, stimulating, enquiry and thought among teachers who agree or differ as to the methods proposed.

THE NATURAL METHOD.

PROFESSOR TH. HENESS, NEW HAVEN, CONN.

Although I am the originator of this method, the public is not indebted to me for the little they know of it, nor for the fraud practised on them under its cover. I was not even consulted in giving it the various names under which it is known. I never consented to its being called Sauveur Method, or Heness-Sauveur Method, or Natural Method, I call it *Sprechlehr-Method*, because that's what it is. It is a method peculiar to myself, as one of our Yale Professors expressed it.

I have no theory to offer, I never took the pains to find one. Certain principles I have in regard to it, but they are really axioms, such as : *If you would learn to speak, speak!* or if you would learn to sing, sing! by reading, writing and grammar you won't learn to speak. Or : *If you learn to write, you begin by making pot hooks*, be it by the Spencerian or by any other method. This axiom applies to all sciences and arts, *ex. gr.*, the first pair of shoes you make after the most learned, careful and prolonged verbal instruction no one

will purchase except perhaps for a joke ; only those shoes, which you make after a *practice* of ten years will prove you to be a master.

The Natural Method is principally based on the closest observations of the manner in which children learn their mother tongue. I am the father of six children, made the best possible use of my opportunities, and came finally to this argument : the mind of a child develops itself with the language and *v. v.*, the child's work is therefore, twofold. After the mother tongue is acquired, the acquisition of a second language is but a simple operation ; however, the same course will secure the same end—faster because the mind is developed in advance, and because the operation is a simple one. What a stupid he must be, who says: I am an adult and cannot learn in that easy way in which, as a child, I learned English; can he not see the contradiction contained in his "can't." What! Can't do even half the work a child two years of age can do?

Others say: a child learning his mother tongue speaks it all day and every day, no wonder, etc. They are right; the wonder is only that they do not see the city on account of the houses, or, plainly speaking, they do not see what they ought to do, when they are to learn the second language. O yes, they reply, we see it, but it is impossible for us to go to Germany or France, and speak there German (French) all day and every day. Therefore the next best thing to do is to study grammar and then your dictionary and translate *Undine*, and to cap the climax, translate Goethe's *Faust* or Schiller's *Wilhelm Tell*. How proud you are, to be equal to such gymnastic feats and to experience a defeat when you are to order a dinner in German, and this in company of friends, who had such a great confidence in your German.

Indeed the acquisition of a language is a question of time. That cook in your kitchen has come a year ago from Germany. She never knew what grammar is, she has no idea of the use of a dictionary, how is it that you speak English to her and she to you? Yes, you say, but she speaks very incorrectly. To be sure, she does, I answer you, but would you not be very glad if you could speak German only as well as she does English; and—she a cook and you? a highly educated lady or gentleman. Who could learn faster and better pursuing the same course? You or she?

Again: Here, this little boy came three months ago from Germany. He can speak English so well, that it makes you envious to hear him speak; and you involuntarily ask yourself: How is this? Answer: that boy learned his English by the Natural Method, and you by grammar and dictionary.

To reproduce the advantages you would have in Germany for

learning German, the Natural Method was originated, and the nearer you can make your circumstances conform to the condition of that cook or that little boy, the better and faster you learn German.

The School of Modern Languages had, therefore, daily sessions of four hours ; and this arrangement is part of the Natural Method. If you change this, you take away one of the main features and conditions of success. Other branches, such as Arithmetic, Geometry, Geography, etc., are taught in German. Take away this, and you deprive the method of another condition of success. I repeat : the acquisition of a language is a question of time ; the longer you dilly-dally about it, taking weekly five, or four, or three, or two, or one hours, or even two lessons in three weeks, etc., the longer by the square or cube root it takes you to obtain your object, because the greater the interval of time between the lessons, the greater the chance of losing the skill acquired, so that it will appear to you and to your teacher, that you make two steps backward for one forward, *i. e.*, you learn nothing but waste time. If you cannot devote sufficient time to your task, you will naturally be satisfied with getting a smattering, which, it is true, many are pleased to pass for the whole. A child makes his first real efforts at language in his second and can say all he knows in his third year. Why not you too in one year ? You surely did not grow more stupid as you grew older.

Definition : The shortest line between two points is the straight line, and the shortest way to obtain what you wish to know, or to be able to do, is to keep your eyes strictly to that and nothing else. Hence, do not go exploring regions lying to the right or to the left of your straight line ! *Sapienti sat.*

If there are any of my readers unwilling to admit my axioms and definitions, let them prove that they are not true, or not applicable to my method. Methinks, however, that there are very few methods and very few arguments with axioms at the bottom.

My method can hardly be mastered by my books (old and new *Leitfaden* and *Sprechlehrer*), which are written rather for the pupil than for the teacher. I consider it a cruel wrong to judge of my method by listening for a few hours to the glowing description of a few self-styled "best exponents," who became so well known only by advertising, peddling or otherwise retailing my method under the title : "German taught in five weeks ; fluent speaking warranted," etc., etc. Of course, but few see the double meaning. A language requires not merely days, weeks and months, but years. And teaching a language by the Natural Method requires a previous drill of one or two years under a master not self-styled. The Natural Method has cost its originator the last twenty years, and he is not done yet improving it.

PROFESSOR L. SAUVEUR, PH. D., LL. D.

You ask me to send you for the November *Interchange* some recommendations for the large number of teachers who are trying to use my method in their work.

You write also that you teachers were very much disappointed in not hearing me at Albany last summer. I was sorry myself not to be able to attend the meeting, for I know that with the pen, very little can be demonstrated in the matter of methods. It is for that reason that after having written considerably on the *Natural Method*, I have established a *College of Languages* where our work is seen before numerous classes, studying seven or eight of the living and dead languages, and strictly taught according to my methods. From two to three thousand pupils have already attended our college and believe in our teaching. Do come yourself next year to Oswego and call there your fellow-teachers: I feel confident you will share our faith in the Natural Method.

For the present, I shall only send for your paper these recommendations:

1. *Carry your pupils at once into the language you teach*, never speaking a word of English during the lessons. This is the great principle of our method, I could say the only essential one; from the start the language to be taught must be used as the only medium of instruction.

2. *Your instruction must be oral at first*. Train the ear of the pupil first, and keep his eye away. He must know how to listen and understand the words from your mouth before reading the sentence in the book.

3. *Go slowly, very slowly*. You are bringing the pupil into a new world. He hears words never heard before and whose music is unknown to him. If you do not, you lose a great benefit of the Natural Method.

4. *Proceed from the known to the unknown*. Make a chain of thoughts. With such a chain, if you are a savant, you can carry your pupils over all the field of human knowledge, and give them, at the same time, a vast vocabulary and a complete grammar.

5. When the moment has come, I mean to say when your pupil understands your speech, and can read my *Causeries*, *teach him the grammar completely, deeply, philosophically*, and train his intelligence by high teaching of the rules of the language and of human mind.

Pay the greatest attention to the form of *verbs, regular and irregular*. These are most completely presented in my work *Grammaire Française, pour les Anglais*.

If your pupil is able to understand the work, carry him with you in the high grammatical discussion presented in my other book, *Entrétiens sur la Grammaire*.

6. With very advanced pupils *translate from English into the language you are reading*. I have translated with my pupils into French, *The Lady of Lyons*, *Eloquence*, by Emerson, *The Vicar of Wakefield* and *Vanity Fair*.

To finish, I beg leave to place here a few words from Prof. Bôcher of Harvard:

"*The Heness-Sauveur system* is the rational way to lead the pupil to understand, speak, read and write a foreign tongue. I would call it the Natural Method. In the hands of a spirited teacher it produces marvellous results, enabling the learner to think and express himself unconsciously in the new language he is acquiring, and to appreciate its genius and feel its niceties.

I think it can be carried out *even in the largest classes*; it is so good and simple that I hope it will be fairly tried by teachers of languages. I desire to say this because I was never convinced of its practicability and excellence myself until I tried it.

It is not superficial. On the contrary, *I know of no system that calls up more mental activity in both teacher and pupil*. There is nothing mechanical or merely formal about it. It lends itself to the highest teaching. *Even the grammatical knowledge imparted by this method is broader than is given by any other*.

As I understand it, there is no good thing in the old system which it does not embrace, if brought in at the proper time," etc.

PROFESSOR W. L. MONTAGUE, DEPARTMENT MODERN LANGUAGES,
AMHERST COLLEGE.

My method of teaching French has been changed very much within fifteen years. This is in a large measure due to the influence of the Summer School of Languages which has been held at Amherst during the past ten years. I have been connected with this school from the beginning, and during the past three years it has been wholly under my direction. I have seen the Natural Method of teaching modern languages exemplified here by Theophilus Heness, the originator of the method in this country, as applied to German, and by Dr. L. Sauveur, who by his own energy and enthusiasm, has done so much to extend and popularize the system. These men have exerted a great influence in awakening a more lively interest in the study of German and French, and in promoting improved methods of instruction. This must be acknowledged by every one who is familiar with this work, and with the teaching of modern languages twenty years ago.

While admitting this, and giving them due honor for their pioneer work in the reformation of teaching, it is not necessary to accept all

their views, or to follow their method without deviation, as though it were perfect and did not admit of improvement or modification.

There are two teachers now at the head of the French and German departments of the Amherst Summer School, who do not follow strictly the "Henness-Sauveur Method," and yet many pupils, who have also attended the Sauveur School of Languages, do not hesitate to say that the instruction now given at Amherst is more thorough and satisfactory, and the progress made is more substantial.

I believe in the Natural Method of teaching modern languages as it is followed at Amherst; a modified form adapted to the age and attainments of the pupils. In the classes for children, there is no modification, but the method pure and simple is strictly followed. In the higher classes, the recitations are all conducted in the language studied, but there is no iron-clad rule that forbids the use of an English word in the class-room. On the contrary, comparisons with the corresponding English idioms are often made, and there is also practice in translating English into French and German, an exercise of great practical value. Moreover, the study of grammar is not neglected, but forms a prominent part of the work. Even in the classes for beginners, questions on the grammar of the language are formed, drawn from the subject of conversation, or the text of the lesson, and a thorough course of instruction is continued until all the grammatical forms of the language become familiar. This is followed in advanced classes, by the more difficult principles of syntax, the history of the language and the study of its literature.

Such a method of instruction, compared with former methods, is more inspiring to the teacher and more interesting and profitable to the pupil. He studies the works of great authors as literature and not as illustrations of the rules of grammar. He reads the foreign language as he reads his own, for the thought, and not for the exercise of translating into English.

Of course the advantages of this method are more marked, and the attainment greater in such a school, where pupils have five or six hours of daily practice with highly cultured native teachers, than in high schools and academies, where the same practice must be limited to one hour daily, or to three or four hours a week. But, even under these circumstances, I believe the new method is better than the old, especially for those who wish to *know* French or German. For those who merely wish to translate into English, by the aid of grammar and dictionary, it may not be so desirable. To know a language, however, one must not only be able to read, but also to write and speak it, and to understand it when spoken by others. By the Natural Method this knowledge can be gained in a fair degree, even

with this limited practice. Only four hours a week are allowed to each of my college classes, but these have been sufficient to awaken a deeper interest in the study, and to secure a broader and more practical knowledge of the language than was possible before the adoption of the Natural Method. The amount of French read in the class during the year has nearly trebled, and the amount of outside reading, on the part of the best scholars, has often exceeded 5,000 pages. The pupil, who won the French prize last year, reported a list of books and authors read in French, during the two years, classified under Science, Fiction, Drama, History, Poetry, Philosophy and Miscellaneous, including a total of 53,189 pages. At the same time he was a prominent scholar in other departments. His facility in reading French was acquired in college, and illustrates the possible attainments by the Natural Method, although, of course, an exceptional case.

Teachers, who doubt the practical success of this method and its use in the highest teaching, would probably have those doubts removed by studying its application in the Summer School of Languages at Amherst College, Amherst, Mass.

Those who have hitherto attended the school are earnest advocates of the method as it is there illustrated by the teacher.

NEW METHOD OF LEARNING GERMAN.

BY ADOLPHE DREYSPRING.

The voice, as manifested in speech and song, is the complement of the sense of hearing. A defect in the one entails a defect in the other. Witness deaf mutes, who are incapable of articulation by ordinary means. Sight and reason may serve as adjuncts in the training of living languages, but it is on the ear "*par excellence*" that we should place our dependence for seizing the *vocal cues* that sway the formative element.

By the inductive process we recovered the laws that govern dead languages, and these are the only channels by which we can make ourselves masters of them; for the throats that voiced them have been silent to us long ago, and of their manner of utterance we have nothing but speculations and conjectures.

These laws, as a fund of learning, were greatly cherished by the scholastics of the middle ages and even to-day are considered in many quarters incomparable as mental whet-stones. Is it a wonder that their practice and delusions in time furnished the canons for the study of modern languages? Their days, however, were numbered when nations, awakening at the shrieks of locomotives, were seized

with fits of commingling. The languages of neighbors became all at once commodities, and an increased demand for them, looking to ways and means for rapid acquisition, was productive of innumerable methods. The latest and most remarkable of those that maintained themselves in public favor for a long time were the "Natural Methods." They are undoubtedly a step in advance of the old; yet their merits are not without alloy, as results are often disappointing. Springing from a revolt against the extremes of a baneful pedantry, they rushed into opposite extremes and went braving the open seas without charts, rudder or compass, beating aimlessly among the elements of speech. There is absolutely neither rhyme nor reason for any such journeys "*à l'aventure*." Human utterance is capable of being generalized and systematized. A pile to be reared should show design in its mass and not exhibit unpardonable disorder.

It may yet be in the remembrance of many a student when, an unsuspecting novice of tender years, he was drawn into the vortex of a grammatical exposition, such as: *er* (he, she, it) is a pronoun, masculine gender, third person, singular, in the nominative case, agrees with its antecedent in number and gender and person; it is subject of *ist*, or lead up to a panoramic display of studied verbal effects, such as: "I have bought the yellow waistcoat of the baker's brother-in-law's neighbor's son." He must have felt as if looking in at the big end of a telescope. We fancy hearing the sighs of the traditional pedagogue sorrowing over the influx of modern heresies, who thinks it a pity that so much erudition should now be lost and that the fallow brains of our young should escape it! * * *

What is the shortest way of acquiring both the mechanism of the German language and the ability to speak it? The system that will solve this problem must contain the following features:

1. Present some of the normal phases of the language first, keeping from beginners the bewildering matter outside of these, such as: anomalies and exceptions. Analogies should be allowed to fructify apace in him, even if he should be betrayed into saying "*ich dachte*," as a child in the vernacular, from analogy, would say "I thought." In both cases it indicates an advance in the language.

2. Selection of elementary material with special reference to what is usually in sight. Ere this, the progressive teacher must have learned to appreciate the force and economical value in language training of applying a foreign term directly to the object itself or its pictorial representation, instead of substituting one term for another. Especially for children with whom sight and hearing are the main media for acquiring knowledge, and who are scarcely capable of abstractly resolving linguistic equivalents, the utility of pictorial or objective illustrations must be evident to every one.

3. Development of the first needs of speech, as manifest by the simple queries: *Was? Wie? Wo? Welcher? Wozu? Wovon? Wessen?* The answers to these may fill page after page, but still answers may be given completely exhausting the subject and yet be in the simplest of forms.

4. It should avail itself of the easiest points of access. As an initiatory step the declensional and conjugational pabulum as usually administered should be avoided. Points of least resistance are nouns, adjectives and prepositions with the connective *ist*. It will be surprising to many to see the amount of work that can be accomplished with the copula *ist*. The mind being left untrammelled by outside matter, the syntactical adjustments can easily be overcome with the use of this connective.

5. It must take advantage of certain vocal cues, the gender-notes of which are supplied by the subject noun as :

Der Tisch, gender note : *er*.

Wie ist der Tisch?

Er ist gross.

Welcher ist gross?

Dieser, nicht jener.

Was für einen ist er?

Er ist ein alter.

Wessen ist er?

Er ist meiner, seiner, etc.

6. It must develop the language out of itself, using grammar only to illustrate the language, not the language to prove the correctness of grammar.

7. Its vocabulary must be within reasonable bounds, and selected from every-day life, and should be presented in progressive paragraphs so constructed that the stock of words is constantly revolving, bringing out successively their literal and idiomatic meanings. Thus, at each recurrence of a word its impression deepens and fastens upon the memory. It is by this means alone that a necessary coalescence of concept and word can be effected.

8. The verb in its flexions must assume the semblance of dialogues. The *ich's*, *er's*, *sie's*, *wir's*, &c., must be vivified by apparent actuality and carried through the various tenses, as shown in the following :

MODEL DRILL.

Ich.

Ich habe hier einen schönen Apfel.

Ich hatte gestern einen schönen Apfel.

Ich habe gestern morgen auch einen schönen Apfel gehabt.

Ich werde morgen wieder (again) einen schönen Apfel haben.

Teacher. *Was hat sie?*

T. *Was hatte sie gestern?*

T. *Was hat sie gestern morgen gehabt?*

T. *Was wird sie morgen wieder haben?*

Sie, she (er).

Class. *Sie hat einen schönen Apfel.*

Cl. *Sie hatte gestern einen schönen Apfel.*

Cl. *Sie hat gestern morgen auch einen schönen Apfel gehabt.*

Cl. *Sie wird morgen wieder einen schönen Apfel haben.*

There will be scarcely any exercise in the class-room affording more profitable enjoyment and diversion than this.

9. It must take special care to interest the student and preserve his enthusiasm for the study. With children, whose minds are apt to wander under any protracted exercise, frequent changes should be in order, such as: Counting aloud in German, following it up with simple addition: *Wie viel ist zwei und zwei?* or subtraction: *Wei viel ist vier weniger eins?* or multiplication: *Wei viel ist zweimal drei?* or division: *Wie vielmal geht zwei in vier?* or dimidiation: *Was ist die Haelfte von sechs?* Another change is afforded by the test lessons in answering questions solely from the illustrations (as given in the Cumulative system) and surrounding objects in the class-room, or giving whole or partial descriptions of them.

Of course a compliance with these points presupposes a thorough teacher; one who is something more than simply a hearer of lessons, and who is alive to the psychological truths revealed to him in the class-room; for he knows that an intelligent appreciation of these truths is indispensable to, and inseparable from, successful work.

FRAU MARIE F. KAPP, INSTRUCTOR IN GERMAN, SMITH COLLEGE.

I dislike much to express publicly my opinion about the so-called "Natural Method."

We have a German saying that people of many "*Ansichten*" possess little "*Einsicht*," and folk of much "*Einsicht*" possess very few "*Ansichten*." My insight into the "Natural Method" is perhaps at fault—certainly not as thorough as it might be—I have never visited the summer schools, or city schools where this method is being carried on, or out, have observed excellent results in my pupils who worked there, after having had a thorough drill, or what was meant to be thorough, in principles of Grammar.

On the other hand, I have found their pupils; when here, very ready to do grammar work with the beginners in German. But these beginners here are girls who have had Latin, Greek, and a year of French, our junior class, consequently they have had college drill in the old languages for two years, and French one year before they come to me. These girls must work comprehensively. I give them Whitney's Grammar, and largely in English, as it is written so, and less time is needed for explanation. They invariably tell me they enjoy it, often that they never enjoyed grammar before. But I leave out, as unused, all Whitney's exercises, German and English, and for these substitute a little German book intended for little children in German schools here, that is, German-English, using Klemm's *Kreis*

II or III, with the grammar for the German work. The learning of folk songs, efforts to put them into narrative (in simplest way) prose, to turn simple sentences into various forms, careful analyzing of sentences, learning short anecdotes to repeat, and using all this German material for class work, makes out our chief German work of the first year.

The translating comes in the last term (and shortest term) of the year, and with the translation, the first regular attempt to tell in narrative form, to paraphrase with synonyms, the matter read, which is generally a drama, and so in metre.

My pupils are educated girls of 19 and 20 years old, not children, or students at high schools. With these latter I should work differently, and do so advise my pupils who wish to teach German. "With very young pupils teach them to read simple prose and songs, give them ease in pronouncing, hearing and using what they are to learn. With older, take a simple, good Grammar, as for instance, the Klemm-Whitney 'German by Practice,' or Whitney's abridged edition, or Otis' grammar, which I have not examined but think must be good—any easy grammar, which however must be a grammar definite and clear, give them some *positive* knowledge about it, and then work with folk stories (not Andersen's, which are pretty but too difficult) Grimm's, folk songs and easy prose." This is my invariable advice to them.

The result then of these observations and experiences has been to strengthen the conviction that a good elementary basis, methodical, clear, positive knowledge of principles of grammar are essential, and that the clearest, least liable to mistakes, manner this can be done, the better. Hence, the grammar in English is good—that is, with English explanations—but with that must come German language work, and here bring in the so-called Natural Method, without, however, losing sight of the fact that the pupil must understand the exercises, not simply repeat them parrot like.

Of the many books published for the use of, and in the interest of, using the Natural Method in German, many are intolerably wearisome. They tend to deaden rather than arouse any "*Sprachgefühl*" by their stupid repetitions of that which exercises no other faculty than that of mechanical memory.

In the introduction to my valued old German grammar by Dr. K. F. Becker, he says :—

"Das Erlernen fremder Sprachen eröffnet den Zugang zu den Geisteswerken fremder Völker. Es vermittelt die Theilnahme an dem Culturleben der Menschheit und ist deshalb eines der wichtigsten Mittel für die geistige und sittliche Erziehung der Jugend. Es übt und

stärkt ferner das Gedächtniss; ohne dessen kräftige und sichere Unterstützung keine tüchtige Geistesarbeit möglich ist.

“—es entwickelt das Denkvermögen. Dazu bedarf es einer wissenschaftlichen; d. h., einer grammatischen, Behandlung der Sprachen.”
“Die häufig gepriesene Methode fremde Sprachen ohne grammatische Grundlage zu lehren, kann wohl zu einer gewissen Sprechfertigkeit führen, aber nie zu voller Herrschaft über die Sprache. Für die geistige Entwicklung ist diese Methode nachtheilig. Sie schwächt das Denkvermögen, und verwirrt das Sprachgefühl.”

We owe very much to the Natural Method—many books which can be used to excellent purpose—but no lasting result can be obtained without a scientific basis to work upon, and the longer this scientific method is used, the quicker and happier, it seems, are the results, when the Natural Method steps in to give practice in the practical use of what is, or has been, so learned.

Superficial work demoralizes, no matter how showy the result, and thorough work in comprehending is an educating influence of more value than the mere speaking of any foreign tongue.

I have had students bring me Otto's German grammar in presenting the German equivalent for our required entrance Greek, and when I sent them away with a Whitney and insisted that it must be worked through in the main, they have come back with “Now I have respect for German grammar.” My old pupils are rarely willing to sell their grammars, though they are ready to part with readers and other matter worked through.

As I said in beginning I do not much like to say just what conclusion I have come to in regard to the Natural Method simply as such, but I am perfectly ready to stand firm to my convictions regarding the necessity of scientific work, and equally ready to learn much from the Natural Method in helping me to make this work all it ought to be in result.

NOTES.

THE ACADEMY is mailed to all subscribers promptly on the first of the month. Subscribers should inform us if it is not received within two days of the time when it ordinarily reaches them.

THE ACADEMY desires to return thanks to those Superintendents who kindly sent to this office the annual reports of their schools.

The Associated Academic Principals of the State of New York will hold the Annual Holiday Conference in the High School, at Syracuse, December 28 and 29, 1886. All secondary teachers will be made welcome, and principals of the State are specially urged to be present. Important questions as to the relation of colleges to secondary schools will be discussed, and a profitable and enjoyable program will be presented.

By a stupid blunder the October ACADEMY printed "exact" for "exalt" in Mr. Thurber's letter in the *Interchange on Rhetorical Exercises*. The sentence referred to should have read, "Passages that inculcate self-sacrifice and exalt the generous sentiment are always at hand." The copy for *Interchange* reached us at the last moment and was hurried into type. The first line after the italics on page 264 should have read, "The subject of this month has evoked a wide-spread interest among teachers."

The following decree was issued in Japan, on July 12, under the Imperial seal:

1. The meridian passing through the centre of the transit instrument at the Observatory of Greenwich shall be the initial meridian for longitude.

2. Longitude shall be counted from this initial meridian in two directions up to 180 degrees, east longitude being plus, and west longitude being minus.

3. On and after the first day of the first month of the twenty-first year of Meiji (January 1, 1888), the time of the meridian of 135 degrees E. shall be used as the standard time throughout the empire.

This is a direct outcome of the International Meridian and Time Congress held at Washington last year, to which the Imperial Government of Japan sent a delegate.

We do not often read an obituary at once so delicate and so discriminating as that of Professor Ephraim Whitman Gurney, in the *Nation* for September 19. Prof. Gurney was the man who for the last sixteen years, more than any other excepting President Eliot, has marked out the course pursued at Harvard. On the accession of President Eliot in 1870, he assumed the office of Dean of the College, and for five years directed the discipline of the college. Previous to that time he had been Assistant Professor of History, and, after an absence of two years in Europe, he again assumed the work of teacher, first in the Chair of Roman Law, and then in that of University Professor of History, which he held up to the time of his death. His life has been, during all these years, so thoroughly identified with the interests of Harvard, that he was little known outside of college circles. Within the circle of his acquaintance, however, few men have exerted stronger influence or been more thoroughly respected both for character and attainments than was Professor Gurney.

In the October *Fortnightly Review* Sir John Lubbock discusses Manual Instruction in a vague and rather diffuse way. He compares German and English schools to the disparagement of the latter. This is by no means remarkable, as German schools are excellent and English schools only passable, though there is in the English system a germ of improvement which eventually will make its schools worthy of England. But Sir John Lubbock cites to the disadvantage of the English Schools that they occupy only twenty hours per week, while in Germany, children of the same age are in school thirty-two hours per week. Then with genuine scientific consistency he shows that in the half-time schools of the Keighley district, where at least one thousand children receive instruction less than fourteen hours a week, the average results are better than where full time is spent in school. He seems to deplore the limited number of subjects in the National schools and to consider that an increase would be an advantage. If we mistake not, the wisest pedagogic thought of the present time is inclined to take exactly the opposite view, and to think the best results may be obtained by a limited number of studies. Certainly the tendency is strongly towards shortening rather than lengthening the number of hours spent in the school-room.

In the *Progressive Batavian* of October 8th, is published an emphatic protest against the compulsion now exercised to force teachers of all grades to attend local institutes. The position it takes seems to us well-chosen. It is not necessary in this connection

to discuss the value of the institutes. They have a place in our present educational system. We see no objection to fixing a penalty for non-attendance in the loss of a proportionate part of the public money. That would simply be an indirect way of taxing the community for the support of the institute even when the community did not see fit to avail itself of the chance offered; but the proposal, among other extreme measures, to annul the teacher's certificate for non-attendance strikes us as unfair in that it has no relevancy to the issue. As an expression of competency the certificate in any given case is either true or false. If true, it should remain in force. If false, it should not be continued because of formal compliance with an order which does not necessarily add one iota to the teacher's competency. It is a fundamental error to consider a teacher's certificate as a reward for good behavior or its withdrawal in the light of a punishment. It is simply a statement and in no sense a prize. That any teacher suffers direct, positive loss in his attainment or competency by remaining at his work when possible opportunities of improvement are offered can not be imagined for a moment. That he does lose the possible chance of improvement all admit, but upon the amount and value of that possible loss there is probably little likelihood of agreement. It seems to us that it should be left to the teacher and the community that employs him to decide whether the prospective loss of non-attendance at the institute may not be over-balanced by the definite gain of continuing school work. It must always be remembered that in all school matters the good of the pupils is the prime thing to be considered.

In its practical working, the proposed penalty seems to us no more reasonable than in theory. We have in mind a teacher of twenty years' experience, a college graduate, well-read in educational literature, and alive to all the issues of the day. It is no disparagement of the Institute instructors to say that he is the peer of any of them in practical success as a teacher. That this man should be disqualified for not attending an Institute where the work is primarily intended to help the most inexperienced of teachers seems to us absurd.

It is an opinion not infrequently expressed, that "married women should not be allowed to teach in the public schools." The idea has taken such form that already in certain cities the regulations forbid their employment. But it was with extreme regret that we lately heard a prominent man, newly identified with educational work, give voice to the sentiment. For it seemed to us that he ignored, or at least put in the background, the only two considerations that

should ever be allowed to have weight in the selection, retention and promotion of teachers. So far as the good of the pupils and of the schools is concerned, the only two requirements for a teacher are character and competency. All questions as to earnestness, devotion and enthusiasm come properly under the head of character, and those of special aptitude, scholarship, experience and success naturally range themselves as elements of competency. By a strict regard for these points alone, it is possible to raise the standard of requirement and increase the efficiency of our schools. The setting up of any other standard of availability degrades the teachers and their work.

It is not necessary in this connection to discuss at length the reasons for excluding any particular class of persons. We are simply making the point that the exclusion of any class except those who show material deficiency in character or competency, is a wrong to those for whose benefit the schools are maintained. The setting up of any restriction which falls on a class rather than on individuals betrays either a misunderstanding of the principles which should guide in the selection of teachers, or is an acknowledgment by the appointing power of weakness and unwillingness to discriminate. If married women, as a rule, allow outside matters to interfere with school work to a pernicious extent, the proper result should be a more careful scrutiny of teachers belonging to that class. Even if the inefficient majority is condemned, that furnishes no reason for the exclusion of the efficient minority. The schools have the right at all times to the best material obtainable, and no extraneous consideration should have a moment's weight against acknowledged merit. We are no stranger to the importunities which beset all those who have any concern in the recommendation or appointment of candidates. But we believe that no man should remain for a moment in any post of responsibility who shrinks from bearing whatever burden of odium or unpopularity may fall upon the rigid and discriminating discharge of his whole responsibility. "The unjust judge" has been a byword from time immemorial, but in every exercise of appointing power there is implied a judicial function not less onerous and exacting, in proportion to the importance of the trust involved, than falls to the lot of the regular bench, and any failure to decide every individual case on its own merits should receive direct and explicit condemnation.

BOOKS RECEIVED.*

Skeleton Lessons in Physiology and Hygiene. By Alice M. Guernsey. Chicago and Boston : The Interstate Publishing Company. Price, 15 cents.

Elementary Lessons in English. Part second : The Parts of Speech and How to Use Them. By Mrs. N. L. Knox-Heath. Boston : Ginn & Co., 1886.

Topics and References in American History, with numerous search questions. By George A. Williams, A. M. Syracuse : C. W. Bardeen, publisher. 1886.

The Interstate Primer and First Reader. By Ellen M. Cyr. Chicago : The Interstate Publishing Company. Boston : 30 Franklin street. Price, 25 cents.

Our Government. How it Grew, What it Does, and How it Does It. By Jesse Macy, Professor of History and Political Science in Iowa College. Boston : Ginn & Co., 1886.

Short Studies from the Dictionary. By Arthur Gilman, M. A., Author of a History of the American People, The Story of Rome, etc. Chicago : The Interstate Publishing Company. Boston : 30 Franklin street.

Poets' Homes. Pen and Pencil Sketches of American Poets and their Homes. By Arthur Gilman and others. Chicago : The Interstate Publishing Company. Boston : 30 Franklin street. Two volumes. Price, 90 cents each.

Studies in Greek and Roman History, or Studies in General History from 1000 B. C. to 476 A. D. By Mary D. Sheldon, recently Professor of History in Wellesley College. Boston : D. C. Heath & Company, publishers. 1886.

Modern Petrography, an Account of the Application of the Microscope to the Study of Geology. By George Huntington Williams, Associate Professor in the Johns Hopkins University. Boston : D. C. Heath & Company, publishers. 1886.

Intermediate Problems in Arithmetic, for junior classes ; containing more than two thousand problems in fractions, reduction, and decimals. By Emma A. Welch, teacher in Montgomery School, Syracuse, N. Y. Syracuse : C. W. Bardeen, publisher. 1886.

The Autobiography of Benjamin Franklin, with notes and a chapter completing the story of his life. Part II., from 1732 to 1757 ; with a sketch of Franklin's life from the point at which his autobiography ends, chiefly drawn from his letters. Boston : Houghton, Mifflin & Company. The Riverside Press, Cambridge. 1886.

Algebraical Exercises and Examination Papers. By H. S. Hall, M. A., formerly Scholar of Christ's College, Cambridge ; Master of the Military and Training Side, Clifton College, and S. R. Knight, B. A., formerly Scholar of Trinity College, Cambridge ; late Assistant Master at Marlborough College. London : Macmillan & Co. 1886.

Macmillan's Progressive German Course, II. Second year, containing conversational lessons on systematic accidence and elementary syntax, with philological illustrations and etymological vocabulary. A new edition, enlarged and thoroughly recast. By Eugene Fasnacht, Assistant Master in Westminster School, Editor of Macmillan's Series of Foreign Classics. London and New York : Macmillan & Company. 1886.

* Any of these books may be more fully noticed hereafter.

Britannicus. Tragédie par Racine, with introduction and notes by Eugène Pellissier, M. A., B. Sc., LL. B. (Univer. Gallic), Assistant Master at Clifton College and Lecturer at University College, Bristol. London and New York: Macmillan & Company. 1886. Price, 90 cents.

This is a thoroughly serviceable edition with well-printed text, an excellent introduction, and brief but helpful notes.

Easy Lessons in French, according to the Cumulative Method. By Adolphe Dreyspring. D. Appleton & Co.

An excellent book for beginners, who tire so soon of the excessive repetition of the Sauveur books. It presents, first, the normal phases of the language, then elementary material, with special reference to what the pupil sees about him, followed by simple queries, and, best of all, accumulating material under new forms and combinations, so that the student can have enthusiasm, which seems an impossibility with the parrot-like repetition of so many modern text-books of French and German. The book has simple illustrations, which will be of assistance more especially to young children.

Education: Intellectual, Moral and Physical. By Herbert Spencer. Boston: Willard Small, 24 Franklin St., 1886.

We have never been an enthusiastic admirer of Mr. Spencer's theory of Education. We do not believe that he or any other materialist can properly set forth the principles which underlie a true system of education. It is conceded, however, that the present book has had much influence in forming the ideas and determining the methods of the present generation of educators. It is fascinating reading, and will always remain one of those books which no student of education—and all teachers should be students of education—can afford to leave unread. The present edition, the handiest and cheapest we have ever seen, seems to us so admirable that we have made arrangements with its publisher to furnish it by mail to subscribers to THE ACADEMY post-paid on receipt of fifty-five cents. The remittance, however, must be made through this office.

The Elements of Geometry. By Webster Wells, S. B., Associate Professor of Mathematics in the Massachusetts Institute of Technology. Boston and New York: Leach, Shewell & Sanborn.

This book makes no great claim and does not herald itself as the long-felt want of the school-room. In fact, the author modestly remarks in his preface that "No originality is claimed for either the matter or arrangement of the book." None the less, we venture to think that the book will be found an excellent, practical and serviceable manual in the class-room. The simple fact that its author does not suppose himself to have originated much that is new in Geometry, makes one feel that his judgment is likely to be sound. Many are sure that they have found some new thing simply because they are ignorant of what others have done. The propositions are well-arranged on the pages without waste or crowding, and the book is convenient in size and attractive in appearance. The original propositions are a valuable feature.

First Lessons in Zoology, adapted for use in Schools. By A. S. Packard, M. D., Ph. D., Professor of Zoology and Geology in Brown University. New York: Henry Holt & Company. 1886.

This book is admirably illustrated, with wood cuts on almost every page, most of them capably done, and its whole appearance is attractive, but in other respects it

is hardly of sufficient excellence to deserve a place in a list of books of the uniform good quality of the Science Series issued by Holt & Company. Definitions are proverbially hard to frame, but those in this book seem unusually open to criticism. The introduction appears to presuppose an amount of knowledge of matters presented later in the book hardly compatible with the notion that this is an elementary manual and that presumably the first definite ideas of the pupil on the subject will be derived from this work. The same criticism applies farther on where the learner is often asked to notice what has not yet been presented. The language often lacks clearness, and might, indeed, sometimes be described as decidedly bungling. Natural History is hardly an exact science, and yet it can scarcely be conceived to be so inexact as some of the descriptions would indicate.

A Practical Rhetoric for Instruction in English Composition and Revision in Colleges and Intermediate Schools. By J. Scott Clark, A. M., Professor of Rhetoric in the College of Liberal Arts, Syracuse University. New York: Henry Holt & Company. 1886.

If rhetoric be, as some think, the art of persuasion, then this book will be of small value. The writer, however, at the outset explicitly disavows such a conception of his subject, and announces the object of practical rhetoric, as he understands it, to be that the student shall write better English than he wrote before he took up the study. This must be borne in mind in considering the work. It is to be judged not as a treatise on rhetoric as a science, or even as an art, but as a manual by the use of which a teacher may be helped in bringing his pupils to express themselves clearly, to write precise, compact, euphonious sentences and punctuate them properly. It is an elementary work and is evidently to be used only as such. It does not discuss Taste, Invention, The Sublime, or The Beautiful, nor does it devote space to setting forth the characteristics of Epic Poetry or to the general discussions of style, which form a noticeable feature of many books on rhetoric. In short, Professor Clark has in the main confined himself to a special, narrow field, and in that field seems to have done his work well. A valuable feature of the book is the large number of sentences for correction given. These, we understand, will be offered for sale also in separate form, printed on heavy paper and intended for special exercises in clearness, purity, propriety, etc. They can be cut out in separate slips and given as exercises in class-work, thus saving valuable time and affording excellent practice.

Wherever the book is adopted with a distinct understanding of its scope and limitations, we predict that it will give satisfaction. It is not intended to cover an entire field, and it would be manifestly unfair to judge it as if it were so intended, or to expect it to do work of which in making it the author had no thought.

The Beginner's Latin Book. By William C. Collar, A. M., Head-Master Roxbury Latin School, and M. Grant Daniell, A. M., Principal Chauncy-Hall School, Boston: Ginn & Co, 1886.

The authors have brought to the making of this book one qualification which enables them to supply the needs of a large number of teachers who have thus far found nothing fitted to their wants. They have had a long and successful experience in teaching Latin to pupils younger than ordinary beginners. There is no lack of excellent books adapted to students of reasonable maturity, but the fact that Latin is usually the first foreign language undertaken, coupled with the fact that few children have the desired maturity when the study is begun, has prevented many teachers from using successfully in the class room books made with great care and

genuine scholarship. In preparing a work for very young pupils, the present writers seem to have produced one admirably suited to a class of schools not heretofore reached. On the other hand, we do not think the book will be found too elementary for work in the ordinary high school, although it is primarily designed for pupils perhaps somewhat younger. It is better to begin with a book rather below than above the pupil's ability when a foreign language is first undertaken, for in no place is there greater need of the stimulus and exhilaration which comes from progress that may be felt by the pupil himself. It is no easy task for the teacher to put himself in the place of the learner in any line of work, and nowhere is this more difficult than in the case of a boy or girl making his first acquaintance with a foreign language. Only by constantly bearing this truth in mind can we place ourselves in the proper attitude for judging of the merits of any beginner's book.

Next to its adaptation to the wants of our own school, the feature in the book which most impresses us is the justness of its perspective, the discrimination with which things not absolutely necessary are excluded, and the insight shown in arranging the work so as to bring the student well along on his way before he meets with any appalling difficulty. In this connection we note that the treatment of the subjunctive is reserved till near the end of the book, and then presents only some of the more common uses. Thus teachers who prefer to complete the first year's work without special study of the subjunctive are able to follow out their wish with little inconvenience. Not less to be commended is the wisdom shown by omitting all translation of the subjunctive in the paradigms.

Colloquia are introduced at the very outset, and continued through the work. There is abundant precedent for this. We incline to think that there is a mild sarcasm concealed in the modest remark in the preface, "If any teacher thinks that the Latinity of his pupils will be injured by the use of the *colloquia*, it is optional with him to omit them altogether without losing the continuity of the lessons." We know there are excellent teachers who look upon the cultivation of a pure Latinity as the great desideratum in the study of Latin. To us, however, it seems that with the ordinary teacher the pupil's Latinity runs a not less serious risk in turning English sentences into Latin. Perhaps the authors might have added, "If the Latinity of the pupil is likely to be injured by the writing of school-boy Latin, the English-Latin exercises may be omitted during the first few years of the study." The cultivation of an absolutely pure Latinity during the first year may well be thought of less importance than bringing home to the pupil the fact that the language he is studying is capable of expressing something of more living interest to him than that "Both you and Balbus are crying out that it is all over with the army."

Great care has evidently been bestowed upon the vocabularies. A minute examination of them has revealed scarcely a word which will not be of immediate use to the student in his future study. There is also genuine insight shown in the fine print suggestions which precede the exercises. They do not burden the learner with a mass of details, but point out some one thing likely to escape his notice.

The copy sent us lacks a general vocabulary, such as is indispensable in a book of this kind.

THE ACADEMY:

A JOURNAL OF SECONDARY EDUCATION.

DEVOTED TO THE INTERESTS OF HIGH SCHOOLS, ACADEMIES AND ACADEMIC DEPARTMENTS.

GEORGE A. BACON, . . . MANAGING EDITOR.

VOL. I.

DECEMBER, 1886.

NO. 9.

THE EXCAVATIONS AT TIRYNS.

The following is a translation (somewhat condensed) of an article in the *Revue des deux Mondes* by M. Emile Burnouf, than whom no authority ranks higher in classical archæology and philology. In 1879 he assisted Dr. Schliemann in his excavations at Troy. Only a few sentences are taken from the introductory part of the article, which treats of excavations in general, as now conducted in different localities.—*George C. Sawyer, Free Academy, Utica, N. Y.*

The three citadels of Troy, Mycenæ, and Tiryns, belonged to the Age of Bronze. They are, consequently, anterior to the poems of Homer, even to the Iliad, which has mention of iron in many places. The chants of the Iliad are posterior to the Dorian Invasion, which is generally placed in the twelfth century, B. C. But the events sung of in the Iliad (those at least which are not myths) took place before this invasion. These three citadels and the period of bronze, to which they belong, are consequently more ancient than the Dorian Invasion. How much more ancient will perhaps be shown by a scientific examination of the collections made in these localities. Such examination may determine what race of men fabricated these objects, may distinguish objects produced at a distance from the products of local industry. I own that upon all these points I consider as premature many of the assertions made in the present volume, and some may well be thought erroneous. These conclusions, however, are not to be charged to the account of Dr. Schliemann alone. Of the four hundred pages comprising the volume upon

Tiryns, one hundred and fifty only are his; there are forty-nine pages of indexes; the rest is the work of German architects or savants. Thus the work is the result of collaboration, in which the authors are not all at agreement. The facts have been observed and recorded with exactness.

Since Tiryns is not so celebrated a place as Troy the following description may be of use to those who have not visited Greece. The plain of Argos opens towards the south. Entering by sea, the port of Nauplia is at the right, on the left the Lernæan marsh; on the left also two and a quarter miles from the sea-shore is seen the citadel of Argos; at the foot of the plain Mycenæ is perceived, which guards the pass leading to Corinth. Tiryns is on the route from Nauplia to Mycenæ, not far from the sea-shore. It is a small isolated hill, sixty feet in height, surmounted by a Cyclopean fortification. The circumference from south to north is about nine hundred feet. The stones of which the wall is composed vary from somewhat less than four to rather more than four tons in weight. These are the largest blocks that are met with in walls of this kind. There is a gallery running along the wall on the eastern side, pierced by six apertures. This gallery has an ogival form, but there are not in reality ogives, since the key of the vault is lacking. Upon the surface were no ruins, but the soil was formed of débris. In the year 1884, under the surveillance of the Hellenic government, Dr. Schliemann undertook to clear away the débris and lay bare the walls. The work was continued in 1885 with the aid of his German collaborateurs.

New points are brought forward with reference to the structure of these fortifications. Up to the present time these walls called Cyclopean were regarded as formed of selected blocks (the Greek term), unwrought and placed one over the other in irregular layers without mortar. It was, moreover, supposed that the spaces left at the angles of these blocks were merely filled in with small stones. This turns out to be an illusion two thousand years old. These blocks, it now appears, have been excavated from a neighboring mountain, cut, even sawn, though of very hard material. They were besides united by a mortar of red earth tempered, which also joined together the small stones used for filling in. This mortar is not perceptible from the outside, but may be distinguished where the stones join on the inside. These facts need verification; we shall wait for them to be confirmed anew and repeatedly by competent persons, for they were unexpected and concern the history of architecture.

The wall facing to the south and from sixteen to seventeen yards thick has been cleared away. Within is found a staircase, descending to a gallery similar to that on the east side, lighted at the end by a loop-hole; it is pierced by five gates opening into five chambers without windows, which appear to have been magazines for the use of the citadel. Similarly it has been ascertained that the last gallery with its six apertures opens into dark chambers. To return to the propylæum, the surface of the Acropolis is divided naturally into three slopes, the most elevated being the southern. The propylæum affords entrance to the upper plateau. It is a double T-shaped wall, pierced by a gate and ornamented in front and behind by two columns $\Xi\text{--}\Xi$, the whole covered by a roof or earthwork. Through this an esplanade is entered, and its wall or fortification forms the south side. Upon the north side is a second propylæum, smaller than the first. Passing between its columns, a square court is reached. To the right are seen the remains of a large altar in the axis of an edifice placed in front towards the north. This edifice of quadrangular shape is built on the usual plan of Greek temples, *i. e.*, a flight of steps, a *pronaos* with columns, a vestibule or front hall, a closed hall or *naos*. This had its frame-work supported in the centre by four columns forming a square, like the posterior hall of the Parthenon. In the middle between the columns is a circular space, which has been taken for a fire-place, but which might have been for other purposes. Around this edifice runs a passage, which isolates it from those inside. To the right is another edifice similarly arranged, but smaller, of a simpler plan, without direct communication with the first mentioned, and provided with a court in front. To right and left of these two buildings is a series of much smaller rooms, difficult of access.

To the height of three feet the walls of these structures are made of stone filled in with mud. Above this point they are made of large bricks, like those used at Troy. All the columns were of wood, laid upon stone. The gables, formed of joists, turned upon bronze sockets, one of which has been found. As to the roofs, all we can say is that they were not tiled, as no tiles have been found. Besides the columns, the principal edifice was ornamented inside with mural paintings. A fragment has been exhumed, representing a bull running, with a man upon its back, who leans upon his knee and lays hold of a horn with his right hand. These paintings were executed with a brush on a coating of pure lime with no admixture of sand, a curious process first discovered at Santorin in 1870.

In fine, all the interior constructions of Tiryns were rude and not very durable. If the blocks of wood were shaped and sawn, it is

surprising that the habitations were so mediocre and otherwise so flimsily constructed. The pretended palaces of the old Asiatic Acropolises were not indeed more luxurious, but the walls of the enclosures were made of unwrought stone, so that there was no contradiction. There is here, at least, an apparent contrast to be explained. Still further it may be noted that the plans are superior to the execution. The propylæa of Tiryns were made after a plan so natural and well conceived that it is nearly identical with that of the propylæa at Athens, the work of one of the grandest architects of antiquity. The two principal edifices follow a plan which is found in all the Hellenic world, at all epochs of its art, *i. e.*, that of the temple. In fine, the sheds (or covered stoops) found round the enclosures when cleared, are of the same type as the porticos of later times, and contain the same idea in the germ. These examples show that the workman was not equal to the art employed; the architect conceived plans which the artisan only imperfectly carried out. It is this insufficiency of the executor and of the implement in use that probably explains also the first of these contradictions. The essential thing was to construct a solid fortress, difficult to escalate. Less time and expense were spent upon the interiors.

The excavations at Tiryns have been well made, yet I regret that a little Byzantine church on the Acropolis, already in a ruined state, has been destroyed. As the Christians formerly built their chapels, usually, if not always, upon sites already consecrated by pagan religions, this was the only proof that an ancient cult had existed upon this Acropolis. To what saint was this chapel dedicated? It would have been well to elucidate this point if possible, for the modern saint most frequently corresponds to the ancient divinity of the place. We know that this divinity was Hercules, who, according to tradition, was born at Tiryns, and set out from there to accomplish his Works. Herein is one of the most curious of legends, which is close-joined to a large part of Grecian mythology, having in all its details a well-marked solar character. All the local histories of Greece begin with mythologic legends; the pagan gods are the personifications of the forces, phenomena and laws of nature; the heroes or demigods form a second class of divinities. In order to know what to make of the legends of Tiryns, we have only to study the genealogical tables which Heyne uses in his edition of Apollodorus. There it will appear that Perseus, grandson of the Day, is a solar personage, as is Hercules; that his uncle, Proetus, the pretended founder of Tiryns, is a solar myth. We learn by a simple linguistic analysis that the Cyclopes are beings derived from the Sun-God, and that Lycia, whence they came, is the same light-journey as that which Perseus

made upon a winged horse. We know the names of these Cyclopes, —Arges, Steropes and Brontes, equivalent to Lightning, Thunderbolt and Thunder. If they were real men, it must be admitted that their godfathers made a happy choice of their names ; while those of Tiryns were named Polyphemus, or the Illustrious, and Hyperbius, or the Very Strong. This is delightful trifling, such as the Greeks had the secret of. But how is it possible, from a present scientific standpoint, to take these legends literally, and seriously examine, by a comparison of these old structures, whether the Cyclopes of Tiryns really came from Lycia in Asia Minor ?

Dr. Schliemann must permit us also not to see palaces in the superior structures of Tiryns. He knows, as well as we, that the Odyssey is a romance, and the dwelling of Alcinous a palace of the Arabian Nights. As for the Iliad, it contains errors, for instance, in respect to iron. It is an empirical process, and entirely unscientific, to pick out passages here and there in the Epic Poems and to group them so as to apply them to the ruins in question. One might as well adapt them to a palace of Pompeii, nay, even to grand houses in Berlin or Paris. I attach no importance to the terms applied by Schliemann's collaborateurs to the constructions at Tiryns. For there the great edifice is the *megaron* of the men, the other is the *megaron* of the women, while the remoter are the *mykhos* or private place for different uses. In fine, by this method there is a system of construction adopted in which one thing only finds no place, this is the god. But where then in Greece is the Acropolis without its god ? There were temples, altars, sanctuaries, upon the mountains and the hills, at the sources of the streams, along the rivers, upon the promontories, in the ports, indeed, everywhere. Hercules, alone, at two paces from Lerna, was omitted in the very place where he had his cradle ! This is not in conformity to the Greek genius, and the ruined chapel is a proof that a cult had formerly existed upon the Tirynthian citadel. The more one thinks of it, the more is one persuaded that the central building, the plan of which is that of a temple, whose walls are thicker than all those of the neighboring halls, and in which has been found a mural painting representing a man mastering a bull, was really the temple of Hercules, which we should necessarily expect in accordance with the religious ideas of the Ancients. The neighboring edifice was also a temple ; the halls to the right and left may have been used for religious services by the lords and their families and the defenders of the citadel. But that the Acropolis was occupied by a prince and that a squire has taken the place of a god is not easy of acceptance.

There is one controverted point to which I will call attention. The time has long passed since the real existence of the Cyclopes has been admitted, and the fortresses formerly designated as Cyclopean are now named Pelasgic. As the Pelasgi had occupied Greece before the arrival of their Aryan relations, the Hellenes, it was thought that these Pelasgi must have fortified themselves in the country. Many local traditions go to support this view ; at Athens, even, the primitive enclosure of the Acropolis bore the name Pelasgian. The names of these Pelasgi or Pelasades have been read under the form of Pelesta in the hieroglyphic inscriptions of the time of Thothmes III., many centuries before the Trojan war. They are found also in the time of Rameses II., the great Sesostris. In the heroic ages the Pelasgi had gained the mastery by sea, supplanting the Phœnicians. Under the name of Philistines the Cretan Pelasgi annihilated Sidon. In fine, from the time of the Dorian Invasion, but little subsequent to the events of the Iliad, the Phœnicians occupied no more than the three isles, Thasos, Milo, Thera. The people of the Aryan race had everywhere supplanted them.

On the other hand the Phœnicians had always been regarded as a commercial people. Dr. Schliemann takes pains to enumerate their commercial stations. They did not penetrate into the interior. They carried in their ships not the products of their own country alone. Even in countries where they remained longest, the excavations bring to light articles, the Phœnician origin of which it would be difficult to demonstrate. Thus the Island of Kimolos has furnished Thera with pottery of non-Arabic origin. These vases may have been carried there by Phœnician vessels, but equally as well by Pelasgian, even before the distant epoch at which Thera was submerged. This shows that, as a precaution and until more ample information, scepticism is the first merit of the Archaeologist.

Suppose, nevertheless, (which is not true), that the potteries of Thera, Rhodes, Cyprus, Tiryns and of a hundred other Mediterranean cities are of Phœnician origin. The most that we can thence conclude is that Phœnician commerce was very extensive and that Phœnicia had large pottery factories. But, from the presence of these vases at so many points, to infer that the Phœnicians once occupied all these countries and that they built the so-called Cyclopean fortresses, is to reason without proofs, and to take a false step ; for it is a principle of criticism in these matters that from movable articles we cannot pass to structures and from a local commerce deduce the possession of a country. The doubt may be pushed even farther. Suppose the Phœnicians may have, for example, occupied Sicily and built a fortress after the Cyclopean style, will any one argue that

therefore the Cyclopes built all the fortresses of this kind? This reasoning from the particular to the general is inadmissible.

It is probable, then, that even after these fortunate excavations, Tiryns will continue to be held to be a Pelasgic fortress and the Phœnicians traders, not constructors of fortresses. It will sooner or later be necessary to submit the various and hazardous hypotheses to the examination of savants who are both archaeologists and linguists, versed equally in the knowledge of the Semitic and Aryan languages and Egyptian matters. They will be able to give the true sense of the myths and legends, and to render to each race of men, to each people, that which legitimately belongs to it in the past. We may already say, in opposition to the *Semitisers*, that almost all the myths and legends of Grecian lands are of Aryan origin, and are explicable by the languages, the myths and the legends of the Aryan race. One runs the risk of making great mistakes in departing from this principle. Still it is also necessary that *Aryanisers* make proper use of their knowledge and apply linguistic science to mythology, as algebra has been applied to geometry with the greatest advantage to all the sciences.

For these reasons many of the assertions made in this book on Tiryns are either contestable or wholly inadmissible. The principal author has, none the less, done a work as praiseworthy as his former one. His collaborateurs, and he also, believe that they have brought to light a Homeric palace like that of Alcinous. So persuaded are they of this that they announce it in the title of their work. One is always free to interpret while demonstration is wanting, but we believe that they are deceived, that there was no royal dwelling, but a group of buildings devoted to the hero worship of Hercules. In our opinion, a solar myth forms the basis of this cult; the Tirynthian princes and the Cyclopes belong to mythology. Moreover the Aryan myth of Hercules is unrelated to Semitic religions. Neither the fortress nor the interior edifices are the work of the Phœnicians; we believe with antiquity that the walls were raised either by Pelasgi or Hellenes, yet we assert nothing positively, and hold ourselves in reserve until these difficult problems are methodically elucidated.

But we praise without reserve Dr. Schliemann both for continuing year after year these costly researches, and for the care taken to publish so accurately the results. Troy and Mycenæ are the culminating points of the ancient *epopee*; they were not really known, they were supposed to be wholly different from what they were in reality. To-day they have first become known. There has been found at Mycenæ in their tombs a whole family of princes and

princesses with their arms, their diadems and ornaments. The excavations of Tiryns were a natural sequence of these at Mycenae. They have resolved certain problems of primitive architecture ; they have put Argolis in connection with certain other points of the ancient world. They have established by a new proof that the Heroic Age is the same as that which in another branch of study is called the Bronze Age. In connection with other excavations made elsewhere not by the agency of Dr. Schliemann they show that this age, very ancient in Egypt, lasted in Greece to the time of the Dorian Invasion, and indicate that the military superiority of the Dorians was due to their use of iron. Thus is found a chain of facts, which, in some years, will be changed into a connected history.

NOTES ON GERMAN SCHOOLS.

BY PROFESSOR JAMES M. GARNETT, UNIVERSITY OF VIRGINIA.

II.

To-day I was at the Gymnasium by nine o'clock and visited two Latin classes, the instruction closing for nearly all the classes on Tuesday and Friday at eleven o'clock. The first class I attended was *Unter-Tertia I*, under *Oberlehrer* M., and I heard a lesson in *Ovid*. The book used was a chrestomathy prepared by Director Ranke, containing selections from Ovid, Vergil and Horace, but chiefly from Ovid, and the passage was from the Creation of the World, which was naturally difficult for boys of twelve or thirteen years of age to understand. They were first required to translate, and were questioned on about twenty-five lines that had been previously gone over and translated in class, and that they were supposed to have prepared, each boy having from two to four lines to read, or being required to answer grammatical and metrical questions, principally, however, questions on the forms, as I noticed that few syntactical questions were asked, and only the simplest metrical rules for hexameter verse were treated, with a few questions on quantity. They were also required to make a written translation of this as it was read in class, each boy having his pen, ink, and exercise-book before him. They were next taken through about fifteen lines more, which they had not prepared, i. e., had not *translated*, though they had looked out the words and written them down, and were allowed to use these lists ; each boy questioned was expected to do the best he could, being assisted by the teacher as often as was necessary.

I notice that more stress seems to be laid on the teaching in class-room than with us, and less on the previous preparation of allotted tasks, at least in these lower classes. The idea seems to be to *help* the boys to think and work for themselves in this early stage, and not leave so much to their own private efforts as to disgust beginners, which I fear we sometimes do. I next visited *Quinta I*, Dr. B-e., and heard questions on a Latin exercise in the *Tirocinium* (for translation into German) on the anomalous verbs, this class standing between those of H. and T., which I heard yesterday. They were exercised part of the time in a manner somewhat similar to the questionings on the *Extemporalia*, and afterwards were practiced in the translation of sentences from the *Militia* from German into Latin, and I got a better idea of these two books than I had formed from a hasty glance yesterday. The class seemed to acquit themselves very well, and here nearly all were on the *qui vive*, and numbers of hands went up signifying their desire to reply whenever a mistake was made. I omitted to record yesterday one point worthy of notice, that in T.'s class when one boy read a sentence from his *Extemporalium* he was allowed to designate another who should translate, which plan might be made to work well, though it is capable of being misapplied.

To-day I heard first *Nepos* in *Quarta I*, Dr. B-n., the life of Epaminondas being the portion handled. Certain boys read the Latin first, and then others translated, four or five lines being assigned to each, but I heard no syntactical questions asked. The boys seemed alive and attentive, and the usual mark of a desire to answer, when a question was asked, viz.: the raising of hands, was plentifully employed. Dr. B-n. attempted to speak a little Latin with his class, but they did not make much out of it. During the class-hour the Director came in with a gentleman from Massachusetts, Mr. A., who also wanted to visit the Gymnasium classes. I next heard Dr. B-r. in *Ober-Tertia II*, on *Cæsar, De Bello Civili*, Kraner's edition with notes being used. He first required the boys to give the Latin equivalent for certain German phrases, which expressions, I presume, had been taken from chapters that had been previously read, and then he took up chaps. 31 and 32 of Bk. I. But a small portion was translated by each boy, and he was questioned on the words and constructions as he finished each sentence. I was particularly struck with the exactness of translation that was demanded, and the care the teachers took to see that each boy understood thoroughly what he read. Here the boys were older and larger than any I had yet seen, and frequently several would answer together, more in a conversational style than one hears in a class-room generally. Also, they did not stand up to translate, as was the case in the other classes,

though some stood up to answer questions. This teacher's method pleased me very much ; he explained synonyms, questioned on the syntax, and on the allusions in the text to matters connected with Roman law and customs ; he was also very gentle and seemed to inspire respect and secure attention. I next heard a French *Stunde* in *Unter-Tertia I*, from Dr. T. An elementary grammar was used, with exercises, and the subject was the usage of the pronouns with the verb and especially of *en* and *y*. Some of the boys had a very good pronunciation and they did tolerably well on the whole, but were more restless and disposed to trifle than any class I have yet seen.

This morning at nine o'clock I heard a *Stunde* in Plane Geometry (*Planimetrie*) from Dr. S. in *Ober-Tertia II*. The subject treated was the elementary propositions relating to the circle, and the book used was a small 8vo, not as thick as one's finger, divided into five parts, embracing Plane and Solid Geometry, Plane Trigonometry, and Algebra. In such a book these subjects must be but partially treated, though it was very concise, giving only the principal theorems, and leaving the development of them, and exercises on them, to be made by the teacher. It contains the *whole course* of Mathematics taught in the Gymnasia from *Quarta* up, except the course in *Arithmetik*, or Algebra, as we should call it, for I find that they give the name *Arithmetik* here to the operations embraced in elementary Algebra. The class was required to repeat the statements of a few propositions, and then each boy drew the figure in his exercise-book, and was questioned on that, or on one drawn on the small black-board by the teacher. The proposition given in the book was varied by exercises embracing the principles learnt in this or in previous lessons, and requiring short and simple proofs. Mistakes were naturally made and some of it seemed "by rote" learning, but I think the majority that were questioned seemed to understand the principles involved, though there was no "going to the board," drawing the figure for one's self, and proving the proposition, as with us, but the boys were required to state the different steps necessary in the constructions made by the teacher. Seeing this book confirms one in the opinion previously formed from studying the *Lehrplan* in Wiese, that Mathematics is not carried as far in the Gymnasia as in our higher schools and colleges, though perhaps it may be carried so far in the *Real-Schulen*. I next visited *Unter-Tertia II*, Dr. G., and heard a Greek *Stunde*, but it consisted simply in the recitation of the Liquid Verbs in their different voices, moods and tenses, and was not specially deserving of notice, except that great stress was laid on the correct pronunciation of Greek *according to the accent*, and whenever a mistake was made in this the question was passed. Here, however, the boys seemed to show less personal regard for the

teacher than in any class I visited, and would imitate him when his back was turned, scuffle with each other, prompt one another, and perform other tricks for which boys are sometimes noted. After the class was over I met Mr. A. again and had some little conversation with him. He has been a teacher some twenty-eight years, came to Europe to remain two years, and has been requested by the Commissioner of Education at Washington to make this examination of German schools, though without acting as a paid agent ; but as he speaks *no* German, and understands “very little,” I should not think he could effect a great deal. As Director Ranke remarked to me about those who came to examine the schools, “*die meisten Engländer und Amerikaner sprechen gar kein Deutsch*” (most Englishmen and Americans speak no German at all), and he did not seem to think that they profited much by it. At eleven this morning I heard a Greek *Stunde* in *Quarta II.* from Dr. S., consisting of a repetition of some half dozen sentences in Jacobs’ Reader which had been committed to memory, and then the translation of these and others, all on the third declension with questions on the nouns of this declension occurring in these sentences, and on the present and imperfect tenses of the verbs, as the class had been studying the forms in Buttman. The questioning here was close and thorough, and the boys seemed interested and awake. I was struck here also with the attention paid to *accent*, not only in pronunciation, but in the statement of rules regarding it. It is *absolutely necessary* to teach boys accent in learning Greek from the alphabet on, as they learn it easier and better when they begin at the beginning : these boys had not been studying Greek a year and were perfectly at home in the elementary rules relating to accent, and seldom made a mistake in pronunciation. Here, as in the elementary Latin classes, the boys were frequently required *all together* to decline a noun, or conjugate a verb, a good plan, but requiring very close attention from the teacher. At the close of the *Stunde* the different *Pensa* for the next day were read out by Dr. S., *Ordinarius* of the class, and taken down by the boys.

ERRATUM.

Through carelessness, our proof reader did not “follow copy” in a part of the dialogue in Prof. Dreyspring’s article in the November *Interchange*. The dialogue referred to should have read as follows :

Der Tisch, gender note : *er* :

Wie ist der Tisch ?

Er ist gross.

Welcher ist gross ?

Dieser, nicht jener.

Was für einer ist es ?

Es ist ein alter.

Wessen ist er ?

Es ist meiner, seiner, &c.

INTERCHANGE.

Communications upon any inside school topic may be addressed to G. R. CUTTING, AUBURN, N. Y. The subject for January will be: "The Interchange of Views at the Holiday Conference of 1886."

The object of *Interchange* is to collate current opinions on methods from eminent teachers, not to decide questions in debate. The readers of THE ACADEMY will judge of the merits of the spirited discussion upon "The Natural Method of Teaching Modern Languages," as the subject has been presented in the November and December numbers of this magazine. These articles have well covered if they have not exhausted the subject. The whole series will be useful to every teacher for reference; and they furnish an illustration of what *Interchange* aims to do for teachers through THE ACADEMY. The originators and other earnest advocates of the "Natural Method" have here ably presented their claims; those who do not repose confidence in the new departure have told why they distrust the method; and eminent instructors who combine both methods have told how, in aiming to strike the golden mean—they conduct their language classes. The names of the educators affixed to each give added weight to the articles. We believe that every thoughtful teacher will gain helpful and suggestive hints from this discussion.

NATURAL METHODS OF TEACHING LANGUAGES.*

PROFESSOR G. F. COMFORT, SYRACUSE UNIVERSITY.

In response to the courteous request of the "Department of Interchange" I gladly avail myself of the columns of your excellent periodical to express my views of the merits and demerits of the so-called "natural" method of teaching languages.

*I was not aware until this paper had been sent to THE ACADEMY that a symposium was to be served to its readers, and that advocates of this subject were to present their side of the question, or I should have abbreviated or modified some passages. Upon seeing the proof, however, I have decided to leave it as it was written, especially as I have given a more elaborate and systematic presentation of the method than its defenders felt at liberty, perhaps, to do. As to the paternity of the method, there scarcely need be much discussion, since most of its features have been adopted in varying proportions, from time immemorial, by teachers in European cities and schools. It is the systematization of these features in a certain form that has given occasion, in America, of the name of "natural" method.

In the first place it may safely be said that a teacher who has but a single method of teaching any subject, which he uses under all circumstances, is as much of a quack in his profession as is a doctor who prescribes one patent nostrum in treating all the diseases to which mortal flesh is heir. A perfect teacher must understand all pedagogical principles and methods. He must be able to adapt them to the varying conditions of different pupils or classes of students who may come under his instruction, having due regard to the particular purpose which in each case the teacher or pupil may have in view in pursuit of the study, and to the length of time that is to be devoted to the subject.

By way of example: If it is the chief purpose of an instructor of a class in ancient or modern languages to utilize this study as an instrumentality in developing skill in the elegant use of the English language, in other words, to turn the study of Latin, Greek, French or German chiefly into an exercise in practical rhetoric in English, this main purpose will be largely secured by requiring the student to give written or oral translations into the most elegant English of which he is capable of the works of the classic authors that are being read. These translations will often not be extremely literal. Rather the thought of the author in a given passage will be carefully discerned and will then be rendered into the most terse, choice and polished English diction.

Again: In an extensive course of lectures upon comparative philology a professor may plan to point out to his classes (which will probably be composed chiefly of college graduates) the morphology, structure and syntax of a number of characteristic languages of widely diverse features and relationships. In this case two or three lectures of an hour in length may suffice to give a general view of a highly cultivated language, as the Arabic, the Turkish, the Persian, the Chinese, or the Japanese; in a single lecture may be presented a skeleton view of such a language as the Gothic, the Icelandic, the Provençal, the Wallachian or the Basque; a single lecture may more than suffice to give all that is known of some languages that were once spoken by great nations, as the Etruscan, the Phœnician, the Celtic or the Iberian.

In another case: A clerk in a grocery or drug-store, in a community where there is a large immigrant German population, may desire to learn words and sentences enough in the German language to serve him in the practical purposes of his particular trade.

Again: A scientist of mature years, as an astronomer, may suddenly find himself in a position where he needs to know enough of French, Italian and Spanish to read scientific books, reports and

periodicals in these languages. Such a person, having already received a liberal education, may acquire a sufficient knowledge of these languages for his special purposes without other aid than a grammar and a dictionary, and without being able to pronounce a word correctly or to understand a spoken sentence in either of these languages. This is the case to-day with one of the most accomplished and distinguished mathematicians in America.

But let us consider the usual conditions in secondary and collegiate schools, where a class studying a certain language, ancient or modern, is under instruction daily for one, two or more years in succession. By the old method in our American schools the pupil began with the formal study of grammar, committing to memory paradigms and grammatical rules, with observations, remarks and exceptions, followed by illustrative examples. Having acquired a grammatical scheme of the morphology and syntax of a language, the pupil proceeded, with grammar and dictionary in hand, to the reading of texts, beginning with the simpler and easier and advancing by more or less gradual stages to the more difficult works of the classic authors. To this were often added elaborate set exercises, to be translated by the pupil into the language.

As a protest, or rather as a rebellion, against this method has sprung up the so-called "natural" method of studying languages. Its advocates and apostles claim that the old method "put the cart before the horse"; "drives the wedge in the large end first"; and violates all the laws of the human mind in the study of language and of languages. They claim that a new language should be learned as nearly as possible after the manner in which the vernacular was acquired. In the practical application of this general view the teachers by the "natural" method vary greatly among themselves, as do the teachers by the old grammatical method. The grammar and the dictionary are generally discarded altogether. The teacher speaks no English and allows none to be spoken by the pupils during the class exercises. By a skilful use of pantomime and of vocal intonation he makes manifest to the eye or the ear the meaning and application of the words which he introduces. One of the fundamental ideas is that the thought or emotion to be expressed is formulated *directly* into the words of the new language, and this without being first formed into the student's vernacular—to be afterwards translated (by any process, however rapid) into the new language:—in other words, to think in the new language from the very first step. The process is thus the same as it would be if the students in the class, instead of being all English-speaking persons, were all of different nationalities—as Italian, Spanish, Danish, Swedish, Russian

Polish, English, etc., there being but one language common to all in the class, *i. e.*, the German or the French, for example, which is being studied.

Again: The student is to refer the spoken sentence in the new language directly to the thought intended to be expressed—also without any intervention of the vernacular; in other words, no translations are to be made to or from the vernacular. The grammatical principles and the morphology of the language, if taught at all, are to be taught by illustrative sentences—perhaps in related juxtaposition, not at all by formal rules and paradigms.

It is claimed that, inasmuch as language, from its very nature, comes from the mouth of the speaker and is received by the ear of the hearer, it is eminently natural that, from the very outset, the main practice by a student should be by the mouth and the ear, not by the eye and the hand (as in studying a grammar and writing exercises or translations into or out of the new language). As an aid in retaining words or sentences in the memory, the teacher often writes them on the blackboard and requires the pupils to copy them, but not until they have first been pronounced to the class and thoroughly understood by them. The eye is thus kept entirely subordinated to the ear.

In the hands of a skilful teacher, who has great fertility of illustration and great talent and ingenuity in pantomime, a quick, docile and faithful pupil can acquire by this method, in a comparatively limited time, a large vocabulary of words, especially of those relating to familiar objects and emotions. He can learn to use, and correctly, many grammatical forms, and to perceive quickly the meaning of many spoken sentences. After faithfully following this method for a time, if he were suddenly placed in the country where the language is spoken (as Germany or France), he could read a bill of fare and order a breakfast when another, who has begun by the study of the grammar and can conjugate all the verbs of the language to perfection, would go hungry.

When compared with the purely grammatical and paradigmical method of *commencing* the study of any of the languages that are usually taught in our schools, and when the study is to be pursued any important length of time, it is the opinion of the writer of this that the balance of advantage is overwhelmingly in favor of the so-called “natural” method. I esteem it also very desirable that all the *positive* features of this method (passing by its negative or lacking features) should be used in some proportion or combination in beginning the study of any language, and that they should be retained in some degree through the entire course of study of a

language, however far it may be pursued, whether in reading the classical (Belles-lettres) literature, scientific books, or periodicals, or in speaking the language. In the hands of hobbyists, which is another name for quacks, the "natural" method, as explained above, has limitations or restraints which greatly curtail its usefulness ; such hobbyists bring the system into undeserved criticism and contempt by claiming too much for it.

If it is folly to reject entirely the use of a dictionary in the thorough study of one's own vernacular, much more is it folly to reject a bi-lingual dictionary in studying a foreign language. It is equal folly to reject the study, at the right time, of formal grammar. A valid argument against their use cannot be drawn from the fact that Homer or Vergil used no grammar or dictionary in studying their own languages, and that Cicero and Paul used none in studying Greek. In our modern education we cannot dispense with these philosophical aids to the critical study of languages. We should put the horse before the cart and use both, dispensing with neither. That practice should precede theory does not mean that practice shall exclude theory. Perhaps it would be better for the advocates of the two methods, instead of making faces at each other, to shake hands, adopt the good features of both plans and thus develop a perfect method.

While every teacher should retain his own individuality and avoid being a mere machine in following any prescribed method, and while he should adapt the method to the condition and purposes of any particular class that may be in hand, I would suggest the following scheme as one that will secure, in a general way, the most desirable results with classes as they are generally organized in our secondary or collegiate schools for the study of any foreign language, ancient or modern :

1. The teacher may begin by speaking a few familiar words before the class, indicating their meaning by signs. He may then give some short sentences involving a simple grammatical principle. One or more similar sentences may be read from the printed page partly with and partly without parallel translations.

2. The teacher will then give the translation into English of all the words that have been used, and will explain the grammatical principle involved in the sentences that have been used ; he may occasionally require the student to formulate a rule covering the grammatical principle.

3. The teacher will then require the student to formulate on the spot new sentences, of his own originating, involving the grammatical principles and the words that have been learned.

4. As a *dernier resort*, to be used solely for the purpose of securing work from dullards or laggards, the teacher may give out a number of English sentences to be put into the new language by the students. (It is presumed, of course, that the teacher himself is a master of the language and does not need to be limited by a few set examples or sentences.)

5. This process will be repeated with new words and new grammatical principles, until the student has acquired a large vocabulary of words and has mastered the essential principles in the grammatical scheme of the language. The teacher, even though he may have only moderate tact and ability in pantomime, will as often as possible introduce sentences in which the meaning of new words and the significance of grammatical forms will be manifest, and thus will not need to be translated or explained. In general he will use translations only as *dernier resorts*, to make clear what is not otherwise patent.

6. It is a most valuable exercise for the student to make classified lists of words as fast as they are learned, putting the various parts of speech, nouns in the various genders, the regular and the irregular verbs, etc., etc., into separate classes. The student will be surprised to see how rapidly he is acquiring words if he thus cherishes them by writing them down as fast as he learns them.

7. The formal study of the grammar, by parts of speech, will not be taken up until the pupil or class has made considerable progress in the study of the language. This may be preceded by frequent references to the grammar, in connection with reading of texts. The formal grammar will thus present itself to the mind of the student as the systematic classification of forms and principles which have already been mostly acquired in detail. This will be driving in the large end of the wedge last, not first.

8. The etymology of words and other philosophical features will generally be introduced rather late in the study of a language. Comparisons will also be introduced between this and other languages with which the student may have some acquaintance. Later still comparative philology will be pursued. Thus, as the student advances to his higher and higher planes, new relations will be observed and fixed in the mind.

9. As soon as the most essential grammatical principles have been analyzed, in the progressive series of introductory practical lessons, the reading of easy texts will be commenced. The teacher will begin by reading a sentence at a time, afterwards expounding it as he may find necessary with a particular class or pupil. This expository mode may be followed at times during all the subsequent study of the lan-

guage by the class. There will be thus developed the habit of rapid and at the same time correct reading of texts. The task may be given to the class occasionally, in the somewhat advanced study of the language, to prepare for the next lesson a careful analysis of all the words and grammatical principles which occur in a passage that has thus been expounded by the instructor.

10. All that has preceded is preliminary and preparatory to reading at sight. This, in my opinion, is the last and highest attainment in the study of a language, one that is demanded of the student by some of the more "philosophical" advocates of the "natural" system, in some schools and colleges, at an absurdly early stage. If, for example, the most learned scholars and keenest critics disagree, after long and most careful study, as to the meaning of many passages in Goethe's *Faust* or Dante's *Divina Comedia*, (or as to the meaning and purpose of the entire work), how is a student in school ever to be able to read these passages at sight, with intelligent understanding? Not only should the student have carefully annotated editions of texts, but he should also avail himself of every accessible aid: grammar and lexicon; dictionaries, biographical, geographical, mythological; maps, pictures, statues, archeological illustrations; and all available translations of the text into English. If the teacher understands that all these aids have been used he will conduct the "recitation" accordingly. He will call upon the student to expound the text, as the teacher himself has done on many occasions, rather than to answer a few catch questions, the main purpose of which so often seems to be to trip up the student. No harm, but rather much good may come, however, from the teacher calling upon a student to read at sight a new part of the text, at almost any stage in the progress of the study, provided this be done in the presence of the teacher, who is thus ready to correct any error that may be seen to arise in the mind of the student. But he should not be encouraged to read much at sight before he has made very considerable progress in a language.

11. Free conversation, within the limit of the capacity of the student to understand and to take part in, should be introduced very early and should be continued throughout the entire period of study of a language to which much time is devoted. The influence of this will be apparent in the more rapid reading and the more clear understanding of texts, even of the most perfected classic literature. The life, the liveliness, the reality of the language is thus kept fresh in the mind of the student, who without this conversation is constantly in danger of practically regarding the language he is studying as an artificial contrivance, instead of a living organism.

What has been said above applies to any language, ancient or modern, which is studied in a school for a long time, as from two to six years:—pre-eminently to German, French or Latin. In a lesser, or rather in a modified degree, it applies to Greek, and in a more modified degree still to Italian, Spanish, or Hebrew, since only a short time is usually given to these languages, and that at an advanced period of scholastic study.

The above I consider the truly natural, that is the philosophical, or, practically and theoretically, the correct method of studying languages under the circumstances given—where they are pursued for a term of years in our schools as now organized, and chiefly for scholastic purposes. It will be seen that elements from the old grammatical and its new rival (which desires to be its supplanter) the so-called “natural” method are taken and moulded into a harmonious whole. It is evident to me that the old grammatical method cannot survive the assault of the “natural” method; it is equally evident that the latter, *as it is usually used in teaching*, is insufficient to meet the demands of scholastic education. I think the great mass of teachers in our schools and colleges will eventually gravitate to the general principles of the method indicated above. Let the dead bury their dead! The old method has long since outlived its mission, if it ever had one. To it may justly be charged in not a small degree the disrepute into which the ancient languages have fallen, in the minds of many thoughtful educators and of many less thoughtful students. The ancient languages have yet a most important role to play in scholastic education in America. I have indicated in another place* what I think that mission ought to be, in accordance with a truly natural, that is a philosophical, scheme of general education.

It may be proper to add here that, in my opinion, when languages are studied for a much shorter time and purely for practical or business purposes, the method should incline much more to the so-called “natural” method. But even in this case more prominence should be given to the grammar than is usually the case when this method is professedly followed, by peripatetic teachers, in summer schools, and in many public and private schools.

—On the other hand a scientist, as in the case of the mathematician referred to early in this article, may acquire a sufficient knowledge of a language to serve his purpose, without a teacher, having merely a grammar and dictionary at hand. Also there are cases of special genius which follow no law. Thus Kossuth gained a marvelous

* Modern Languages in Education, C. W. Bardeen, Publisher.

facility in the use of the English language while in prison, with only a bible and a dictionary to use. Mezzofanti required only a week to get a tolerably good speaking knowledge of a language, if he could have but a grammar and a dictionary of it, with a couple of books of text. Also there are some students who have fair, perhaps even brilliant, talents in some directions, but who apparently are unable to get a good reading or speaking knowledge of a foreign language, no matter how faithful the teacher may be, or what method he may follow. Much caution is thus to be used in condemning or approving a method of instruction by its results on a given student or in the hands of a given teacher. Pedagogical views and theories should be based upon a knowledge of the physiological and psychological constitution of the human being. Starting from these premises our reasoning, in pedagogical theories, should be distinctly *a priori*. Only when a method has been extensively applied, and to a multitude of cases, can we form a legitimate judgment of its results and say that we know the tree by its fruit.

PROF. W. T. HEWETT, DEPARTMENT OF GERMAN, CORNELL
UNIVERSITY.

The advocates of the "natural" method of teaching modern languages have apparently captured the citadel of the argument by the name which they have chosen for their system, and the question arises, what is the natural method of teaching or acquiring language?

The answer is: "Learn a language as a child learns its mother tongue." If this statement embodies the essence of this mode of instruction, we must ask what is the process by which a child learns to speak? It is surrounded by the speech of its country. There is no blurring or obscuring of impressions: one sound and only one is associated with every object or action. The child assigns a certain meaning to a tone of the voice before it knows a single word. By the application of certain sounds to particular things it learns the names of persons and of objects. By repetition memory fixes the sound as the representative of an idea. Words of description introduce the notion of quality, of good and bad, of color, heat and size. Verbs of incomplete predication, and picture-words, give the idea of actions, and the relations of substance and quality. The conception of time follows, and adverbs indicate the mode of verbal action. Nouns as the objects of verbs and prepositions follow. The child passes from the generic to the specific, from applying a single term to all animals, to discriminating the characteristics of each. Terms

descriptive of physical objects are broadened in meaning to have a secondary and spiritual signification. Many expressions in the vocabulary of both the child and the man have been learned without even truly analyzing them. Stereotyped, hereditary forms are adopted without any conscious mental action. This is in brief the process of the child's development in language in its own home and country. But the condition of pupils who begin the study of a foreign language in this country is different. They already possess a vocabulary fixed in the memory; every word suggests at once an object or action or quality. The mind is full of the images of things. The steps of the child's development cannot be repeated exactly in later study. The process must be different: new names must be associated with familiar things: terms in part arbitrary and in part natural must be acquired so that they come at command at the sight of the object; or kindred words in a changed form must be learned. The child must at the same time retain and constantly use all its former store of words. It cannot be transported into a foreign world for more than an hour or two a day, or a few hours a week. The years through which a child grows into the life and spirit of its mother tongue, attaining even then but a limited vocabulary, cannot be repeated. More rapid results are possible, and methods corresponding to the awakened powers of the child must be employed.

The "natural" method, strictly followed, would require that all instruction should be oral, by objects and by forms presented to the eye. But in advanced instruction we cannot stop here: other methods must be employed to keep pace with the mind's expansion and its developed powers. We should ignore most important methods of training in use in the acquisition of other branches of knowledge, if we stopped with the oral, or "natural" method. That method is alone natural which takes cognizance of a pupil's surroundings, his purposes in life, his object in acquiring the language, and his intellectual capabilities in learning. The mind generalizes; the principles of language admit of condensed statement; the facts must be grouped in rules which enunciate the usages of the language, if they are to be retained. Systematic grammar is necessary, and language must be studied as the embodiment of thought, the philosophy of expression, in order to secure the highest culture. The mode in which a thought is conceived, the subtle influence of particles, prefixes and suffixes, must form a part of the training in language. Language thus studied affords a valuable discipline and indirectly prepares the way for the study of logic and philosophy.

What is natural at one period of life is not natural, in the sense of being adapted, to all periods of study. The scholar of disciplined mind who seeks to master a language by the natural method alone, would make limited progress. The gift of generalization, of comparison of forms, and of insight into kindred words, would be sacrificed by adopting the method of the child. The scientific method of teaching language requires that all the powers should be enlisted in the work. Hence any exclusive system will fail to accomplish the highest results, and will overlook essential facts of intellectual growth. That method which evokes all the powers of the pupil's mind is the best; the ear, the voice and the eye must alike be taught, and this triple object must be kept in view throughout the course. Analogy is a suggestive and ever active principle in the acquisition of language, and a knowledge of related words, inflexions, and principles in one language, facilitates the mastery of every other. A knowledge of Latin is a key to the attainment of all the romance languages, but only a clear and comprehensive knowledge of its words and forms will facilitate an acquaintance with the derivative tongues. A superficial, speaking knowledge of German does not contribute to the knowledge of Anglo-Saxon and of English speech, while a scientific knowledge is a most valuable aid. A defect of the so-called "natural" method is that it appeals to the memory exclusively, and unless supplemented by other methods leaves the student with a bare knowledge of the idioms taught but destitute of the principles and analogies of the language beyond those imparted by oral practice; students so taught are often deficient in a systematic knowledge of the inflections and their subsequent progress is less thorough than that of pupils who have been trained by established methods.

The culture of the memory alone never made a great scholar: a knowledge of several languages learned familiarly where they are spoken fails, in itself, to give intellectual culture. The knowledge of German possessed by the children of German parents, born in this country, is often an obstacle to the thorough study of their native tongue. A facility in phrases is often accompanied by a real failure to discriminate properly the meaning of words in English. Those delicate distinctions in thought existing in a language are often lost in the case of students to whom both languages are alike. One language seems to displace the other, as Hamerton holds, and to make the possessor insensible to subtle shades of meaning. Even in the case of great scholars who seem to know equally the language and literature of two nations, the idioms of one language are often transferred unconsciously to the other. If we examine the results achieved by American students who have

resided abroad, we are confirmed in our view of the limited value of the acquisition of a language mainly by intercourse, without thorough systematic study. Many who have taken a degree at a foreign university, and mingled intimately with the people, but who have devoted themselves to pursuits other than the language itself, have acquired only an uncertain facility in speaking and writing. If this is the case with students who have resided abroad, being daily in a foreign atmosphere, hearing in lectures and conversation only the language of the country, it is true by a stronger reasoning of pupils in this country, who enjoy but an hour or two of instruction per day in a foreign language, and speak and write and think the remainder of the time in English. Students study the modern languages mainly for an acquaintance with the literature; the time which can be devoted to it is limited. If all the available time were consumed in studying by the oral method, a knowledge of the literature, and the discipline which comes from thorough study of the language would be lost. A teacher who employed exclusively the oral method would fail to call into exercise some of the highest powers of the pupil, and the results would be meagre and unsatisfying. The oral method should be assigned to its true place. It is an important and valuable aid in training the ear to understand the spoken language, and the organs of speech to pronounce correctly. Translation at hearing is an admirable accompaniment of linguistic instruction, and should be practiced constantly in the study of language. If familiar explanations and lectures in the language itself are given, it will form a useful auxiliary to any course.

It is fallacious to hope to impart to all students the ability to speak a foreign language fluently. Few would have occasion to use the language if acquired. It is therefore unwise to insist upon a speaking knowledge as the end of the study. It is a valuable aid in the mastery of grammatical forms, and a key to a facile acquaintance with the literature. Indeed, a true appreciation of poetry, as well as its expression, is impossible without the *feeling* which comes from an inner knowledge of the spirit as well as of the sounds of the language.

The manifest merit of the natural method should not be obscured by the exclusive claim that it is a substitute for, and should displace other recognized and approved systems of instruction. As an accompaniment of higher study, it will perform a useful and possibly indispensable office.

PROFESSOR H. C. G. BRANDT, DEPARTMENT OF FRENCH AND GERMAN,
HAMILTON COLLEGE.

The "Natural Method" is a re-action from the old "Grammar Method," as it may be called, in accordance with which the dead

languages have been taught for centuries. The Grammar Method led to looking upon grammar as an end in itself, and not as a means to gaining a full appreciation of, and a deep insight into, such a great language as Greek for instance. It is still, and justly, considered as affording great mental discipline, particularly when special attention is paid to a nicely elaborated syntax such as both Latin and Greek can boast of. When these two languages shall be no longer the staple requirements for entrance into college, and with mathematics, the chief required studies for at least two years of the college course, it will be time to study Gothic, or Icelandic, or sixteenth century French, or eighteenth century German, according to this method. Or does any one doubt, that to one who has never studied Latin and Greek, the prose of Rabelais, Montaigne and Lessing will be as difficult and as profitable in mental discipline as Aristotle and Plato are to a student of Greek? The grammar method was made use of in the learning of living languages, and soon found wanting, because we have very different purposes in view when we study these living languages. For instance, we desire to *speak* French and German, we wish to acquire a certain fluency in speaking them, "*eine gewisse Sprechfertigkeit*." Such a facility of expressing ourselves in a living language as the cultured Romans tried to attain in Greek, has not been aspired to for centuries in a dead language. For even the Latin spoken in the middle ages, and certainly the almost ludicrous attempts to speak it, made in the classical seminary of the German University and at English and American Commencements are hardly to be compared with what we try to accomplish in speaking and otherwise using the language of a nation contemporaneous with us, our next door neighbor, into whose life and spirit we would enter heart and soul.

Now when this "Sprechfertigkeit" is aimed at, the natural method is the proper and only one to use. In my opinion there can be no dispute about it. Children under twelve or thirteen years of age, in the nursery, in the kindergarten, in the private or public school, under the guidance of a foreign born maid, governess or skilful teacher, attain a most remarkable fluency of speech in French or German, and even in each of these languages. Again, grown persons who have struggled through a dry grammar either with or without a teacher, and even persons who have never looked into a grammar, can attain a similar fluency. Travelers for pleasure or on business, shopkeepers, young ladies and young gentlemen at fashionable boarding-schools, the shoddy genteel at home or abroad aim at *speaking* a living language, and can be taught successfully by this method. And this is saying a great deal for the method, considering

the difficult pupils that it has to deal with. Hundreds of teachers of French and German, who may not be able to go abroad—and I am sure they are doing the next best thing—migrate, like birds, to the summer-school of languages, where the natural method is handled most skilfully and profitably by the masters, yea, the very fathers the method. It transfers our American children to the French or German nursery, and tries to restore to grown persons the circumstances and conditions of that childhood, in which they would have learned two or three languages just as well as one, in which the mother or "*bonne*" was all in all to them—phonology, syntax, dictionary. But I think the natural method is not so old as we generally fancy, nor will it do when anything else but the speaking of a language is aimed at. I believe that Cæsar learned to speak Greek as elegantly as he did, by the natural method, then probably called the "oral," a method that has been employed, though often without a professional teacher, ever since nations have condescended to learn the language of gentiles or barbarians.

The "Natural Method" leads most quickly and thoroughly to the speaking of a living language, but applied to a dead language it must utterly fail and has thus failed. The main reason is, that the teacher employing it can not know a dead language as he does his own mother-tongue. I would even go further and say, that to employ this method most successfully, the teacher should be foreign born. It requires such an insight into the language, such a deep "*sprachgefühl*" as we can only have in our mother-tongue. Hence Americans should be slower to adopt the method than they are. I have seen mothers teach their children in this way and heard them speaking German or French in the nursery, who were not fit to do this, though they had been abroad and had been taught "naturally". It is better that they see to it that the children learn proper English instead of poor German and French.

The natural method has exerted a great influence upon other methods of teaching. I have said it was a reaction from the exclusively grammatical method and as such it was carried to an extreme. It can not be employed in the teaching of the dead languages. It can not do many other things, which its true and its false advocates claim for it. When we say we wish to learn German or French or Italian, we do not mean necessarily, that we wish to *speak* it. We certainly do not mean that we wish *only* to *speak* it.

I firmly believe that *the method of teaching should vary with the object of the student*. Suppose there are thirty or forty students in a class at one of our larger institutions of learning, who wish to and are to study French, merely so far as to be able to read scientific

or historical prose. They may be students who will elect later in the course, Natural Science, History, Political Economy or Fine Arts. It would be foolish and unjust to them, to put them through the Natural Method. It is true, these students do not take a very elevated view of our language. They consider it as a commodity. But is it really any lower than the view of the traveler or shopkeeper or young lady or young gentleman, who wish to *speak* merely? A speaking knowledge so often only means a larger or smaller number of phrases, questions and answers upon the state of the weather, the fashions, social events, the bill of fare (which is French anyway), the last German, the latest sporting news. Now, to the students mentioned above, desiring a reading knowledge merely, I should give a couple of lesson on the alphabet and pronunciation, then a half dozen lessons picked out from a larger grammar, that contain the most essential inflections of article, noun, adjective and verb, and start them reading at once, easy prose in French, short poems and easy prose in German. They must read as much as possible. Much of the grammar can be taught in connection with the reading by references rather than in separate lessons. Scholars younger than college students I should put into *Sheldon's Short German Grammar* and use *Whitney's* or my own later.

When the students' object goes beyond a mere reading knowledge, I should start them in the grammar in the same way as above, but I employ two other means in addition, viz.: *The oral method* and *the writing of exercises*. By the oral method I mean so much of the natural method, that I put questions to the class in German, beginning with the first grammar lesson. I believe the ear should be trained from the very start. For some time the student will answer in English only, but after a while he will give German answers, if it be no more than *nein, ja, or ich weiss nicht*. The translating of English into German I begin with the fifth or sixth lesson. Some forty or fifty sentences are written out at home, once a week. I correct them and take a whole hour, when I return them to the class, for comments in German, changing the sentences in various ways and leading the student to form new sentences from the material in the old ones. This threefold method, combining grammar, speaking and exercises, I have used and tried for a number of years, and, I think, with some success. For the first term (of thirteen weeks) I give three times a week very large doses of grammar, so that we go over the whole first part of my grammar, omitting the matter that is in nonpareil and very little that is in brevier. In the next terms I lay stress upon reading as much as possible and teach grammar only in connection with the reading by references. Senior year (the third year of Ger-

man) I can lecture to the class in German on Literature and Historical Grammar and the class speaks with some fluency. The oral part of my method I owe entirely to the natural method, while the grammar and the exercises are directly opposed to it. I should use the same method with much younger scholars than college students, but begin perhaps with *Otis's* small grammar, if German is the first foreign language that they undertake. Perhaps I should add, that in connection with the oral method I have short poems learned by heart and recited by the beginners. This benefits their pronunciation also. To the advanced students I assign certain topics in connection with the reading, which they look up and on which they prepare a brief "*vortrag*" or talk. I have also found very convenient material for speaking, as well as for reading, in *Deutsch's Colloquial Reader*, though the inexact translations in the notes and the incomplete vocabulary are very annoying.

In conclusion let me say, that the natural method has in one way injured the reputation of modern language studies. So many teachers, who use it exclusively, make it appear as a sort of rosy, tearless path. The work is supposed to be done by the teacher. No preparation is required. A shallow fluency of phrases is aimed at and reached, which are to pass for a knowledge of French and German. A knowledge of a modern language means "*im allerweitsten Sinn*," a great deal more than this. It means difficult and extensive reading, an intimate acquaintance with literature, a historical study of the language, speaking and writing, all to be carried on and acquired only by as hard work as is required in any department.

MISS MINNA HINKEL, DEPARTMENT OF GERMAN, VASSAR COLLEGE.

The success in acquiring a thorough knowledge of the German language depends chiefly on a suitable method of teaching and learning. Now there are two leading methods,—the one essentially *theoretical*, the other *practical*. The exponents of the former are the grammars of Ollendorf, Woodbury, Otto and others,—the latter, originating with Jacotot and Hamilton, is represented by what is now called the *natural method*. Each of these methods has its decided merits, but the question is, whether either of them fully answers the requirements. These are two-fold; first, the method must be adapted to those mental faculties which with the majority of students are most active at the period at which they learn the language, in order that they may acquire it with the least expenditure of time and labor,—second, which is the essential feature in the study of any modern language, it must not only give the student a general idea of the

grammatical structure and the literature of the language, but at the same time enable him to use it as a medium of intercourse. From this point of view it would seem that neither the one nor the other fulfills entirely these requirements.

The first method, which we call *theoretical*, is originally an application of the old system of teaching the ancient languages, and treats the modern idiom as if it were a dead language. It, therefore, lays all stress on an exhaustive knowledge of its grammatical structure, as if it were not a means for another object, but the chief object itself. It generally makes the pupil go through a long and minute course of grammatical rules and exceptions, combined with a long series of written exercises, before studying the leading authors and using the language as a medium of intercourse. This mode of instruction is suitable neither for younger nor for older learners. With the younger pupils, it is tedious and unproductive, because their reasoning faculties, which are especially called into action in the study of grammar, are not sufficiently developed and trained to master an intricate system of grammar. The older students, on the other hand, do not require to be led through a complicated grammatical course. After having become acquainted with the principal points of etymology and syntax, they are able in reading authors to become familiar with the peculiarities of the idiom through their own observations. The undue amount of time and labor spent on written exercises, is more or less unprofitable; for being in itself chiefly of a theoretical character, it retards the student in attaining directly and without delay his chief object in view, which is to acquire a practical facility in reading and understanding authors and making himself understood in the foreign idiom. Experience has certainly shown that pupils taught by this method, often after years of instruction are not able to give a prompt answer to a simple question and to express themselves coherently in the foreign tongue.

The *natural method*,—a decided improvement on the preceding one,—aims at making the pupil at once familiar with the living idiom, without any previous grammatical preparation or subsequent strictly systematic teaching. Using from the very beginning the foreign tongue as the medium of instruction, it puts the pupil at once to a course of *practical training*, intended to make him acquire the rudiments of grammar,—declensions, conjugations and general rules of Syntax,—as well as the subtleties and peculiarities of the idiom, by means of a series of appropriate conversations and oral exercises on the basis of reading selections of prose and poetry. This method is justly called the natural, because by it the pupil is expected to learn the idiom, as it were, naturally, or by himself, just as children and sometimes grown persons acquire a language very

quickly from oral intercourse, without grammar or teacher, and some know how to sing and play by ear, without having learned a note of music. But this is just the point where this method is open to a timely modification. With children and young learners, the receptive faculties are so strong and active, that they very easily learn by rote, and readily catch, imitate and assimilate what they hear. Not so with the majority of students whose reasoning faculties have already been called into action and disciplined. They have acquired the facility of learning the general rules of pronunciation, etymology and syntax, in a much shorter time directly from a simple grammar than by a more roundabout and laborious process of analysis and induction.

It would accordingly seem best to pursue a judicious combination of the theoretical and the practical method.

Since the chief difficulties of the German language consist in the declensions, conjugations, and a few points in construction, before taking up reading, a few weeks should be spent on the *essentials* of grammar,—the paradigms of nouns, adjectives and pronouns, the conjugation of the different classes of verbs, and in Syntax, on the rules for the inversion of the subject and the construction of dependent sentences. As soon as these points are clearly understood, reading connected with exercises in paraphrasing and memorizing should be taken up at once, and the teacher at the same time should begin to use the German as the exclusive medium of instruction. In reading, Grimm's fairy tales are good to begin with, followed by short stories and novelettes, of which there is quite a variety, then, as these become too easy, the standard authors in connection with the history of literature. Idiomatic expressions and important points of etymology and syntax can be more easily understood and learned when met with in the course of reading than by poring over them in the grammar. Besides it is expedient to take up original composition at an early period, beginning with simple sentences illustrating some rule, or employing some idiom or verb in different modes, tenses, and sentences, and then to pass over to the writing of essays, with the subject of which the student is so familiar, that he need give his attention only to the form of expression.

When thus a thorough foundation has been laid, a higher course of reading and criticism and the special study of the different periods of literature will naturally follow.

PRINCIPAL GEORGE A. BACON, SYRACUSE HIGH SCHOOL.

The word "nature" has two meanings. We speak of a child of Nature and also of the nature of a child. The advocates of the "Natural Method" are proud to call it the method of Nature. To all

thinking minds the name at once suggests the prime defects of the system. Like all Nature's methods it is slow, wasteful and unsatisfactory. It is a striking commentary on the progress of educational science that an idea which would not command a serious thought in any other field of work receives consideration in the educational world, is applauded by the unthinking, and has indeed a limited following even among a certain class of teachers. Nature's methods may serve for education, although no one goes to his work in a state of Nature, or depends on Nature's protection against heat and cold, or uses Nature's means of conveyance when railroads are at hand, or eats raw food because it is "nearer Nature." It is hard to see why education should not receive some benefit from the progress of civilization, why in this direction alone we should insist on our original prerogatives as children of Nature. When all our civilization is teeming with scientific and artificial helps, when in all processes of mechanics and husbandry, human skill is pushed to its utmost for artificial appliances better suited to the results to be attained, it is not readily apparent why in acquiring languages we should be remanded to the tender mercies of the "Natural Method."

This is purely an *a priori* view of the subject. To be sure of our ground it is necessary to look at the practical results. In the case of the child they seem fully to sustain our *a priori* reasoning. After a dozen years under the natural method, the child, unless carefully trained by artificial means, possesses a scant and rudimentary knowledge of his own tongue, with a small vocabulary and limited range of expression. In the case of adults who have been trained in foreign languages by this method, unless our experience has been exceptional, the meagreness of the results can be explained only on the supposition that they have been taught according to the method of Nature.

If by a natural method were meant a method which takes into consideration the nature of the learner, the language to be learned, the object in learning, the time at command, and the circumstances that surround each individual case, an entirely different complexion would be given to the whole question. Instead of the iron frame of the "Natural Method", to which every learner must be stretched or shortened, we should have an easy couch on which the longest will not be maimed or the shortest feel his joints pulled asunder. In such a method there would be room for all the enthusiasm and magnetic power on which the new school relies, and also for the minute care and pains-taking fidelity of those who uphold the scientific view.

The empirical character of the "Natural Method" appears from the fact that its advocates have always failed to recognize that differences in the conditions under which a language is to be learned necessitate changes in methods of instruction. This is seen in their failure to discern the difference in mental environment between childhood and maturity. The child has relations with but few objects and these relations are of the simplest kind. Whole domains of knowledge are not yet open to him. His acquaintance with objects and his perception of their connection come slowly, and his vocabulary may well grow with equal slowness. His thoughts are not complex, and the simplest forms are adequate to their expression. The adult, on the other hand, has for years not only been extending his acquaintance with objects and entering new fields of mental activity, but with every fresh acquisition he has established new relations with all that made up his being, and these have become in turn centres of new relations. All this complex net-work must be transferred before its possessor can come to feel at home in a new language. He may temporarily take a domicile in it without serious discomfort, but he can in no sense be said to be at home there. The comparison implied in this figure seems not inapt. In our childhood we easily accommodate ourselves to our environment. The child needs but his parents and his playthings to make for himself at once a home among new surroundings. But the adult must take time to form other relations in place of the accumulation of years. It would seem to be axiomatic that the larger the environment the longer and more difficult the transfer, and as a corollary to this would come the conclusion that the means of effecting one will not necessarily be adequate to effect the other. The man of letters or of business can hardly expect to move from his own land into a strange one as easily as when a student or an apprentice he shouldered his knapsack and trudged away into the unknown. The man with a hand-press and a single font of type may journey from town to town without inconvenience or serious loss. The same could hardly be affirmed of the Riverside Press.

Years ago there came to the school where the writer was, two German lads, one eight, the other sixteen years of age. The latter was the brighter and more thoughtful of the two. Moreover the loss of an arm had made him doubly anxious to distinguish himself in mental work and he applied himself accordingly, with the utmost diligence to learning English. In external advantages for acquiring the language the two possessed identical opportunities; but when the younger was saying with perfect readiness everything that he thought, the elder was embarrassed at every turn. It was noticed at the same

time that the elder had acquired a much larger vocabulary than the other, and that if it was required to understand a passage of English, either spoken or written, or turn its meaning into German, either orally or in writing, the elder succeeded far better than the younger. It had simply been impossible for him to transfer his vocabulary and mental environment from one language to the other in the period of time which had served to transfer the smaller possessions of his younger brother. I make this point because many teachers, like Professor Heness in the November *Interchange*, have fallen into the error that only a defective method prevents a man of wide range of thought from transferring his possessions from one language to another as easily as an ignorant servant girl. The same servant girl brought all her worldly goods to this country in a single bundle. As well expect the man of means to carry all his possessions in a shawl-strap. The man of culture can learn all the servant girl's vocabulary by any method, and apply it more correctly than she does, at a small expenditure of time and effort, but of what use is it to him? He can pack and carry all her goods in a bundle as easily as she can, but to what purpose? He wants his own possessions transported, not hers. It is easy enough to carry a single trunk wherever one goes. But what of those who want to have with them in a foreign land all their household goods and gods?

The very fact that a man has a wide range of thought stands in the way of his readily learning to express himself in a new language, and puts him at a disadvantage when compared with a child. To illustrate, let us suppose that the objects which limit the thought of a child at a given age are three hundred, that he knows the names of these and also three hundred other words to express the modifications of these objects and their relations with one another. He has then only to learn six hundred words in order to express his whole range of thought, and all his thinking may be carried on in the new language, so that, since we think as well as speak in words, his thinking no less than his speaking gives him practice in the new language. But in the case of the mature man, to whom thousands of objects are known and who expresses their relations in a thousand different ways, many thousand words must be learned, with all their delicate shades of meaning, before he can satisfactorily express himself in a foreign tongue, and until he can so express himself he must perforce do all his mature thinking in the old language rather than in the new, and thus lose all that unconscious practice in thinking in the new language which is possible to the child.

It is this inability of the adult mentally "to stay in a language all the time", that constitutes the chief difficulty in acquiring a new

language. If it were possible for our thoughts to live in the strange medium, we might obtain results far out-ranking the advantages of a residence abroad. One makes little progress in a foreign tongue if all business and reading is done in a familiar one, especially if business and reading are a source of pleasure. So, if one's enjoyment is largely in thought, the difficulty of thinking in the new language constantly discourages its use in mental processes.

In forming a scientific method of teaching, which shall consider the nature of the subject and of the learner, this relation of thought-life to learning must be considered. In the "Natural Method" we escape all that, for we need only follow Nature, and she teaches all alike, the child idiot and the child Plato, the Hottentot and the Frenchman. It is the office of science and of art, as distinguished from Nature, to discover and apply principles, to adapt means to end, to consider varying circumstances and in large measure to be governed by them. It is the function of scientific pedagogy to modify and improve the methods of Nature, not blindly to follow them.

*ASSOCIATED ACADEMIC PRINCIPALS OF THE
STATE OF NEW YORK.*

SECOND ANNUAL HOLIDAY CONFERENCE, SYRACUSE, N. Y.,
DECEMBER 28, 29, 1886.

OFFICERS FOR 1886.

PRESIDENT,

G. R. Cutting, Auburn.

VICE-PRESIDENT,

Charles F. Wheelock, Canajoharie.

SECRETARY AND TREASURER,

Henry W. Callahan, Penn Yan.

EXECUTIVE COMMITTEE,

George A. Bacon, Syracuse,

Daniel C. Farr, Glens Falls,

Eliot R. Payson, Binghamton.

To all Principals of Secondary Schools :

Last year the plan of a holiday conference of the academic principals of the State of New York was a dream. This year such a meeting will have the prestige that necessarily accompanies an organization completed, an enrollment of the leading teachers of the State in its membership, an endorsement after trial of its methods of conducting a conference, and the conviction that such a conference has a mission as one agency to elevate the teachers' calling into a profession.

Moreover, the changes made in some of the details of conducting Regents' Examinations, the public attention that was aroused in the legislature to the necessities of the secondary schools, and a year's successful conduct of the only educational magazine in America exclusively devoted to the interests of secondary schools, speak for the more public influences that emanated from the Holiday Conference of last year. We believe that, in addition to such benefits, each principal then present carried back to his work that inspiration that comes only from contact with others in similar work, and many helpful suggestions, together with personal acquaintances formed that have exerted influence for good through the year. We cordially invite all teachers in secondary schools to attend the Holiday Conference of 1886, to be held in Syracuse, N. Y., on Tuesday and Wednesday, December 28th and 29th.

The Executive Committee will be in session Monday evening, December 27th, at eight o'clock, at the Conference Headquarters at the Vanderbilt. The public sessions of the Conference will begin Tuesday A. M. at ten o'clock, at the Syracuse High School building.

The leading hotels of Syracuse will furnish the usual reduced rates during the Conference.

No formal papers will be read, but informal discussions of practical methods of school work will characterize the sessions.

Extract from the Constitution :

"Any principal of a secondary school may become a member of the association by the payment of an annual fee of fifty cents.

Ex-principals who have been in service five years or more are eligible to membership."

Arrange your holiday vacation so as to stop two days with us at Syracuse; invite your friends interested in secondary education to attend the Conference with you; write to Dr. Geo. A. Bacon, Syracuse, N. Y., Chairman of the Executive Committee, as to any topic that you would like to have discussed in the sessions; bring with you a disposition to be helpful and a spirit to strengthen the fraternal bonds established between principals,—and the Holiday Conference of 1886 will be a source of personal pleasure and profit.

G. R. CUTTING, President.

NOTES.

THE ACADEMY is mailed to all subscribers promptly on the first of the month. Subscribers should inform us if it is not received within two days of the time when it ordinarily reaches them.

Copies of the March ACADEMY are in great demand. We will send twenty-five cents in postage stamps in return for every copy of that issue which is mailed to this office until further notice.

Last month in our notice of Collar & Daniell's Beginner's Latin Book, we called attention to the fact that the copy sent us lacked a general vocabulary. We have since received the book complete.

Those interested in the teaching of Latin will find in the *Michigan School Moderator* for November 18th, published at Lansing, an excellent paper on "The Educational Value of Latin," which was read before the first meeting of the Michigan School-Masters' Club, by Principal J. O. Reed of the East Saginaw High School.

The large amount of valuable material which appears in our *Interchange* in this number has crowded out much matter that we should gladly have presented to our readers this month. In the January number, we shall present a highly practical paper on "*The Teaching of Latin*," read by Principal Peck, of Providence High School, before a recent meeting of the Rhode Island Teachers' Association, together with an admirable paper by Professor Hewett, of Cornell University, on "*The Mutual Relations of the Colleges and Academies*."

The publishers of *Science* announce that, beginning November 26, 1886, the supplement of every fourth number of *Science* (weekly) will be devoted to Education and Pedagogics. These numbers (thirteen each year) will be re-printed as a separate scientific and educational journal to be called *Science and Education*.

The new journal thus formed will be complete in itself, and will be furnished to subscribers for \$1.50 a year. It will discuss *The History of Education, The Art of Instruction, The Science of Education, Classical Study, Industrial Education, Science Teaching, Normal School Methods, School Discipline, Common School Questions*. The high degree of success which *Science* has achieved in the past justifies us in expecting that this new venture will be one of the most valuable helps that has ever been placed within the reach of teachers. In our own work we have found *Science* and *The Nation* to be the most valuable educational papers with which we are familiar.

The second meeting of the Michigan Schoolmasters' Club was held at Ann Arbor on the morning and afternoon of Saturday, October 23. College professors, city superintendents, high school and normal school men from different parts of the state were in attendance. Four papers were read, and each was followed by a general discussion, led by some one previously appointed for that purpose. A general interest was manifested in the proceedings of the club. The organization seems to be fulfilling its promise of becoming one of the most helpful educational associations in the West. Its special field is secondary education in its bearings on collegiate education.

Prof. Delos Fall, of Albion College, in his paper, "The Inductive Method of Teaching the Sciences," presented an argument for the observational method in natural and physical science. This method, he claimed was partly deductive, though chiefly inductive. His central thought was that science should be studied by questioning nature, by obtaining facts and reasoning from them. In the discussion which followed, the field for consideration was broadened to include linguistic and historical science. It was urged that the same principle holds in all sciences—that one should get facts together and generalize upon them. So far as there was difference of opinion expressed in the discussion, it was not as regards the method but merely concerning the terms used.

"The Formation and use of the Educational Journal," a paper presented by Supt. J. A. Stewart, of Monroe, attributed the widespread indifference to the educational periodicals partly to a lack of professional spirit on the part of teachers, and partly to the desire on the part of publishers to advance their financial interests, in many cases to the prejudice of their readers. It is a difficult thing to edit a good educational journal. Such an one must be fearless and outspoken. It should give reports of work actually done, not mere theories.

"Collegiate and Secondary Instruction in English" was the theme of Mr. A. W. Burnett, of the University of Michigan. He held that no English study is adequate which does not consider the language in its historical features. Historical grammar is the only fitting introduction to higher English work. Theorizing is out of place here, inasmuch as the grammarian is merely a recorder of the facts of language. It is encouraging that, at the present time, larger attention than formerly, is devoted to the proper study of language and literature.

Principal J. H. Drake, of the Battle Creek High School, read a paper on "Methods of Teaching Latin." He presented, in detail, a system of Latin instruction for high schools, arguing the necessity of introducing all lines of study—quantity, words, analysis, syntax, history, geology, antiquities, mythology, as early as is possible, and continuing them throughout the course. Constant attention to all matters mentioned above, constant drill, constant reviews of earlier principles are essential if pupils are to get full disciplinary and culture value in the work, and proper preparation for class work in college.

At the business meeting of the Club, the retiring officers were reelected. The next meeting will be held at some time during the winter. The plan is to have three meetings each year at Ann Arbor.

BOOKS RECEIVED.*

German Classics edited with English notes, etc. By C. A. Buchheim, Phil. Doc., F. C. V., Vol. iv, Schiller's Historische Skizzen, Egmonts Leben und Tod, Belagerung von Antwerpen. Oxford: at the Clarendon Press. 1885.

We find in this little volume two pieces from Schiller, little known and rarely read, but possessing in a high degree the literary and historical characteristics which have made Schiller one of the most memorial of historical writers. Unlike other works edited by Dr. Buchheim, they are printed in Roman letters.

Essential Studies in English and American Literature, with Questions and Exercises, Selected Readings and References, Numerous Biographical Notes, etc., etc. For School and College Use. By James Baldwin, Ph. D., author of "Baldwin's English Literature and Literary Criticism," in two volumes, "The Story of Siegfried," "The Book Lover," "The Teacher's Register," etc. Philadelphia: John E. Potter & Company, 617 Sansom Street.

On a cursory examination, this book makes a decidedly favorable impression. We have not, however, been able to give it so careful a consideration as to enable us to pronounce upon its merits with any feeling of assurance. It gives decidedly more prominence to American Literature than many of the manuals.

Louis Agassiz. His Life and Correspondence Edited by Elizabeth Cary Agassiz. In Two Volumes. Boston: Houghton, Mifflin & Company. The Riverside Press, Cambridge. 1886.

This book deserves a place on every teacher's shelves side by side with Dean Stanley's Life of Dr. Arnold. Few lives are more full of interest, and in fewer biographies is the story so well told. There is intrinsic interest in every chapter. Reading it after a day's hard work is a recreation and an inspiration.

Our space does not permit even an outline of the work, and no outline can give any adequate conception of its charm and value. The letters from Agassiz and his friends possess great interest, revealing as they do, something of the familiar correspondence of famous men, and presenting a phase of their work not ordinarily open to the public gaze. We cannot help wishing these letters could all have appeared in the language and exact form in which they were written, but we respect the reasons of the author for presenting them in English, and think she has succeeded admirably in transferring to another language the individuality of each.

It is almost the only biography which ever seemed to us too short.

Das Kalte Herz. Märchen von Wilhelm Hauff. Edited with English notes, glossary, and a grammatical appendix. By W. N. van der Smissen, M. A., lecturer on German in University College, Toronto; Editor of "Grimm's Märchen." Boston: D. C. Heath & Co. 1886.

Unlike many of the stories of Hauff, this one presents a definite though unobtrusive moral. Perhaps the moral is so unobtrusive that it will not always be recognized, but it is there, and an excellent moral too. Aside from its moral, however, we do not think the present work is as well adapted for school use as many others.

The scene is laid in the Black Forest, and the language is decidedly colored by the scene. There are words and expressions which the learner will be little apt to find in ordinary German, and the learning of which can be of very little value. The notes are ample for the explanation of all difficulties, and seem to us unusually well-

* Any of these books may be more fully noticed hereafter.

prepared. The vocabulary is made expressly for the story, and underlines the up and means stay back of following the primary sense of most words, and in some cases the secondary also. There is also added a grammatical appendix. The German is printed in Roman letters, and *k* when following *d* has been invariably omitted. Like all Mr. Heath's books this is a model of good taste in typography, press-work and general make up.

The Philosophy of Education. By Johann Karl Friedrich Rosenkranz, Doctor of Theology and Professor of Philosophy at the University of Göttingen. Translated from the German by Anna C. Brackett. Second Edition, revised, and accompanied with commentary and analysis. New York: D. Appleton & Co. 1876.

This work first appeared in German under the title *Pädagogik und Ethik* in 1851. During the years 1872-73-74 an English translation appeared in the *Journal of Speculative Philosophy*, and an edition of two thousand copies was reprinted in a separate volume.

Superiority of position as a writer on education is not well known and should be need comment. The present translation is a marked improvement on the preceding one for popular use. The technical work of the translator has been admirably done. The terseness of the original rendered the idea of the author consistently obscure, and the former translation often exaggerated this obscurity. In the present edition by the judicious explanation and paraphrasing of obscure parts, the work is much better adapted to the general reader. The power of the present writer, while in no sense they may be said to follow, the book may really be very valuable addition. The book cannot be called easy reading. There is altogether too much in it that requires careful consideration and necessitates a persistent use of the judgment and reasoning faculties than we are inclined to give to light literature. The material is concentrated rather than diffused. It takes up the whole subject systematically and demands a careful perusal by every teacher who proposes to master the science of his vocation.

Contributions to the Science of Education. By William H. Payne, A. M., Professor of the science and art of teaching in the University of Michigan, etc. New York: Harper & Brothers. 1886.

We have read this work carefully, much of it twice, some of it three times. That a book written by one of the foremost teachers of Pedagogics in the country merits the attention of all those who aspire to be anything but empirics in their calling, goes without saying. That all could read without dissent the theories and outspoken views of one who expresses himself definitely on questions which occupy all thinking minds in these days, would be small compliment to the author. The prominent impression on reading the book is that the writer has thought most conscientiously over his ground many times before writing a line. This is no ordinary quality in these days of facile work. Surely less prominent is the fact that the writer has at command to a remarkable extent the educational history of the past. This is to be expected of one who has translated and edited the best history of education ever written. The third characteristic that presents itself is his rare facility of illustration. By a single sentence, giving concrete form to an abstract notion, the author often makes vivid and permanent a course of argument that in other hands would have presented only a dim and misty mass to the mind's eye.

Mr. Payne believes in a science of education. Scholarship attracts him. He would have culture for culture's sake, even if it added nothing to the pocket of its possessor. He confesses his bias, and asks to be heard not for his personality or position, but for his thought. He does not hesitate to take issue with Herbert Spencer, the demi-god of the believers in the practical. He thinks it of more im-

portance to make every human being a full, well-rounded entity than to fashion it into an instrument of any craft or calling, no matter how valuable. The key to his whole attitude in approaching the calling and preparation of teachers lies in a single line at the end of the eighth chapter, "I write in behalf of teaching as a spiritual art", and this thought dominates the whole purpose of the book so far as it bears directly on the teacher's work. He is in no degree forgetful of the difficulties and limitations that surround the practical work of the teacher, and if we mistake not he would be no harsh judge in viewing the practical work of the over-burdened or ill-trained. The possession of high ideals does not interfere with a due appreciation of unsuccessful effort. But with low ideals Mr. Payne has no sympathy.

Perhaps the most important chapter in the book is that on *Education Values*. If we understand him rightly, the author believes that, like the physician, the true teacher should understand and be able to administer the remedy for each abnormal case of mind development, just as the doctor knows how to stimulate by proper treatment the action of the heart or liver. He would have the teacher know what exercises best strengthen the will or the perceptive faculty, and would have him apply his knowledge to the perfecting of symmetry in the child's mind. It seems to us that it is time this thought came home to teachers. The physician who, finding a child's lungs were weak while his brain was active, should devote all the resources of his skill to the development of brain, who should neglect the weak point of the organization and centre all his thoughts on what would thrive without his care, would find small appreciation in the very community where a teacher is applauded for discovering and strengthening the faculties that least of all need his efforts.

We do not find it possible to agree with the author in all his conclusions. The book is sure to meet with severe criticism from some of the newly risen lights in the art of teaching. But we have never read a book on education whose scope and spirit was more entirely to be commended, or one whose theories rested on so firm a basis of historical research and scientific psychology.

Hints Toward a Select and Descriptive Bibliography of Education. Arranged by topics, and indexed by authors. By G. Stanley Hall and John M. Mansfield. Boston: D. C. Heath & Co. 1886.

In a book of 308 pages Dr. Hall and his coadjutor give us 2,146 titles of educational publications, besides several hundred references to works of minor, or less direct, importance, all arranged under sixty headings. To every studious pedagogist (we have excellent authority for the word) the book is of the greatest interest and value. In whatever department one may desire to read, one will find here his topic distinctly specified, and under this topic an abundant citation of titles, with frequent brief hints towards guidance in making a choice. These hints from Dr. Hall's pen are so good, so far as they go, that we can not help wishing that their author had found it possible to extend and multiply them greatly; for the book, as it stands, will seem to ninety-nine in a hundred of those who will try to use it, to present an *embarras de richesse*, and almost to need a key, as do the labyrinths in children's picture books.

Somewhat more than 900, or 42 per cent., of the major titles are German. Books in English and French, with a very few in Italian and other languages, make up the rest. The preponderance of books in German, in this pre-eminent German department of intellectual activity, was inevitable. No thorough reading of pedagogy without German is possible. We wonder rather that so many non-German titles were within the authors' range. Of such titles they have doubtless excluded fewer than of the former. The German lists of pedagogic writings are many and long, so that wise selection from them, with the purpose to omit what is altogether

dreary or obsolete, is a task requiring endless patience and thorough acquaintance with the field. To have rendered this service with a fair measure of success entitles the authors to the gratitude of every educator who still hopes to do his stint of professional reading.

Of course, every one who has a pedagogical shelf in his library looks to see if the books he knows and has are honored by Dr. Hall by inclusion in his list. And every one soon begins to find omissions in the book: but then it must be noted that in title and in preface the authors use the most modest expressions and carefully disclaim all idea of completeness. They afford help to every reader, and every reader may afford help to them. But it is they who have come more than half way, and have actually made a book while the rest of us have read to ourselves and said nothing. Hence we are far from finding fault because we think of a good many books, or editions of books, that seem to us *praefergere eo ipso quod effigies eorum non visebantur*.

We should willingly have seen German books by Geerling, Zwez, Flach, Guenther, Christensen (and we know about him), one that does not appear by Clemens Nohl, and one by P. Heinrich Schwarz. We miss books in French by Cadet, Chalamet, Baudrillart, Guardia, Hippeau, Marion, Von, Legouvé, Issaurat, Frary, Bigot, Vesiot, Milsand, Vincent, and the volume by several writers of *Conférences Pédagogiques faites aux instituteurs délégués à l'exposition de 1878*. As Italian books are not wholly excluded, we would fain have met the names of Siciliani, Fornelli, Denti, Zaglia, Veniali, Sergi, even of "Modesto Picco," and many others. Of American books no notable omission occurs to us except that of the work by Sears, Edwards and Felton on *Classical Studies*. We do not, however, fear the reproach of speaking from the point of view of the bibliopole rather than from that of the bibliographer, when we gently urge our complaint that American Editions are not duly recognized. The reader, for example, is referred to a costly, incomplete English edition of Joseph Payne's Lectures, when he might have been informed of the existence of an American Edition that is complete and much more reasonable in price. Latham "On The Action of Examinations" is an invaluable work, but no pedagogue can afford the edition here announced. D'Arcy Thompson's "Day Dreams" and Spencer's "Education" should not be purchased on the information afforded by our authors.

Scientific pedagogists that might be offended by the authors' classification under sixty topics are placated in advance in the preface, where full consciousness of the purely external character of the scheme is expressed and this method of classification is defended by Dr. Hall in the following language: "I believe that partly by some such grouping, and by the system of cross-references, to be facilitated by numbering each book under each head (and indeed here begun, but made largely impossible by the necessity of electrotyping each score or two of pages to free type for the rest), and partly by the slowly unfolding systematic character of psychology and ethics, on which all educational systems rest, all the cohesion there is between the vast departments of thought included under the term education can be sufficiently brought out."

It would be a real misfortune for pedagogic studies in America if the habit of writing English like this sentence should grow upon Dr. Hall. It is a curious echo of the worst German style, now falling happily into disfavor even in Germany, as the ancient languages are serving less as models, and as English and French are coming to be more generally read. At his best, Dr. Hall writes a singularly clear and simple English. The preface of the book under notice shows him at his worst.

We indulged our impatience pretty freely after Dr. Hall's Bibliography was announced and until it appeared. But we most sincerely wish that Messrs. Heath & Company had kept it within their own precincts during whatever time had been needed to eliminate a most unconscionable mass of typographical errors. The book bristles with such easily avoidable faults. They occur mostly in German titles, and occasionally not only disfigure, but even disguise, these titles almost beyond recognition. Were there not so many, we would cite a few; but they are legion. The index also is made with a most perplexing lack of intelligence. Very many names appear two, or even three, times, copying the different ways in which initials appear in the text, and principal references are not distinguished from subordinate ones.

The Hall-mark in pedagogy is already a guarantee of excellence in the broad and large sense; and as this is the main thing, let us be thankful that it is appearing on so many productions.

THE ACADEMY:

A JOURNAL OF SECONDARY EDUCATION.

DEVOTED TO THE INTERESTS OF HIGH SCHOOLS, ACADEMIES AND ACADEMIC
DEPARTMENTS.

GEORGE A. BACON, . . . MANAGING EDITOR.

VOL. I.	JANUARY, 1887.	NO. 10.
---------	----------------	---------

*THE MUTUAL RELATIONS OF THE COLLEGES
AND ACADEMIES.**

BY PROF. WATERMAN THOMAS HEWETT, CORNELL UNIVERSITY.

XIII.

New York possesses in the University of the State an organized institution which, by skilful administration, may exert an effective influence on all secondary schools; by it they may be brought into such relations to higher learning as will give vigor, directness and unity to all subordinate instruction. The public schools and the colleges should not be parts of independent and divergent systems. The higher should condition the lower; influence from above should work downward through all the schools of the state, and advanced education should not be held in trammels by ineffective methods of teaching or organization in the subordinate schools.

The Board of Regents constitutes a central authority by which the public schools are brought under direct supervision, such as does not exist in any other State. Different methods shape instruction in New England and the West, the character of which we shall discuss later. We assume that the aim of any educational system should reveal unity of purpose extending to all schools; the demands of the higher institutions should find their supplement in the lower, and

* A paper read before the University Convocation in Albany, July 8, 1886.

the lower should afford the basis of all that is later developed in advanced instruction. The Regents' examinations exert an influence extending to all our high schools and academies, an influence pre-eminently beneficial to elevate and shape the character of the instruction in those schools. It remains to inquire whether everything is attained that is possible, and whether equal results are not achieved in other states without this system ; whether there are not modifications and enlargements which may perfect a system already meritorious, but capable of higher results.

This official supervision, proceeding from a central bureau, is exerted mainly by examinations. Papers equal in character are sent to the principals of the high schools and academies, and the division of a certain fund is based upon the number of scholars who pass successfully a set examination.

The efforts of teachers are largely directed to prepare the greatest number or pupils for this examination. An element of possible danger has already been recognized in this theory ; unless the papers issued by the Secretary of the Board of Regents are scientific in their character, covering broadly the subject which is taught, teachers will fall into formalism and literalness in instruction, aiming not so much to impart a mastery of a given subject, as a technical training based upon questions which are expected, and which the experience of years may enable them to anticipate. This will be the case, unless there is great freshness and originality in the papers, which should embody the views of the most skilful educators, and develop every subject from the standpoint of the most scientific instruction. The central defect of this system is its lack of personality ; formal papers, however excellent, based upon no distinctive text-book and possibly apart from the general instruction, can give but an unsatisfying result : much, and possibly essential features of the year's instruction will not be included ; and pupils will strive with anxiety and uncertainty toward an indefinite goal. Only the utmost skill and wisdom can prevent these results in a large number of cases. My observation and my inquiries confirm this impression, and I think the above statement not unfairly characterizes the attitude of pupils who approach these examinations. The German government requires the course in *prima*, the last two years of the gymnasium, to be taken entire by all students, "that the instruction in this highest class may not degenerate into a preparation for the examination, that the pupil may have the requisite time to come steadily and without overhurry to the fullness of the measure of his powers and character ; that he may be securely and thoroughly formed, instead of being bewildered and op-

pressed by a mass of information hastily heaped together." The great Wolf was accustomed to say, "*Perverse student qui examinibus studet.*" He applies himself wrongly who applies himself for the sake of examinations. An official inspection of the instruction and work of every teacher and school by a competent educator, would exert an additional impulse and guide which the mere formal character of the examination papers cannot effect. With this method I would compare the system which has sprung up throughout the high schools of Michigan. The University of Michigan forms the crown of the public school system of the State. It is supported by a state tax and governed by Regents elected by popular vote. Tuition is free to all students from the state; it is practically what the German universities are sometimes called, and the name which the Dutch universities still retain, the "high school" of the state. Instead of reserving the exclusive right to test the scholarship of candidates for admission as formerly, candidates are admitted without examination from schools whose curriculum of study has been approved by a committee of the faculty of the university. This committee, or some members of it, visits any high school or academy whose governing board or principal requests it. If the committee, after inspecting the methods and the character of the instruction, and the results of the examination, is satisfied of the thoroughness of the work, graduates are admitted to the university without examination upon presenting the diploma of the school. If, by experience, it should be found that the diploma is issued to unworthy students, the university withdraws from that school the right to the free admission of its graduates.

In some cases, high schools in large cities have been debarred from this honor for years, until their instruction has been improved. The result has been that high schools covet this privilege, and vie with each other in the thoroughness with which their students are fitted for the university, and a uniform, high standard of scholarship in the elementary schools is maintained. I ascribe this result to the unifying of the requirements throughout the secondary schools, and to personal inspection by competent scholars of the work that is done in every school. President Angell has stated in successive reports that the university has suffered no loss from allowing the power of examination to pass to the high schools, but that the verdict of experience has shown that graduates admitted by diploma from approved schools, have maintained a standing which justifies a continuation of the system. Cornell University has a similar standing committee which examines the courses of study in the high schools and academies, which apply for the free admission of their pupils.

Those who are familiar with the final examinations in the gymnasia of Germany will recognize that there is an approach here to conceding to our high schools the rights and privileges of the graduates of the gymnasia. The *Abiturientenprüfungen* admit to the universities without further examination. The state regulation of instruction in the subordinate schools, prescribing the number of hours which shall be devoted to Latin, Greek, mathematics, history, the modern languages and religious instruction, makes a compact system possible, which cannot be applied in this country in the same way. According to the present law, the exertion of the influence of a central authority must be indirect, still permitting a large liberty to the school boards. To one who is familiar with the high standing of certain schools in New England, such as the Phillips Academies in Exeter, N. H. and Andover, Mass., the Boston Latin school and others; it is a matter of surprise that there are not more schools in New York, with its greater population, of equal reputation. Harvard University has affected the character of the instruction in all the secondary schools of New England. President Eliot testifies that every advance in the requirements for admission to Harvard, has been met by a corresponding advance in the instruction in the secondary schools. Harvard, by its reputation and character, has thus accomplished indirectly, what the University of Michigan has accomplished by direct effort.

There is a portion of President Eliot's last report which may have a profound signification, if the future shall confirm what seems to be a present tendency. Within the last twenty years there has been a gradual decline in the number of students admitted to Harvard University from the public schools, and an increasing percentage of students who come from endowed or private schools. In 1866 the number who entered Harvard from the public schools was thirty-one per cent. of the entire number; ten years later, in 1876, it had fallen to 22.6 per cent.; in 1885 it had increased to twenty-eight per cent.

There is, however, a possible explanation of this phenomenon in the fact that a far larger number of the students of Harvard twenty years ago was drawn from established schools of the State of Massachusetts, while in recent years the number of admissions from other states has greatly increased. In 1850 the number of students from Massachusetts was 76.3 per cent., while in 1883 it was 54 per cent.; in 1850 the proportion of students from New England was 83.1 per cent., while in 1883 it was only 63 per cent. If it should be shown that our public schools are becoming divorced from their normal position as seminaries for our colleges, it would indicate a divergence

from their proper missions, or an incapacity to keep pace with the demands of higher learning. An encouraging fact, however, which re-establishes our confidence in the scope of high school instruction is shown by the statement that there is an increasing number of high schools that prepare students for our best colleges. In the period from 1867-74, 52 public schools prepared students for Harvard college; from 1871-80 the number had risen to 78, and from 1876-85 the number had reached 81, or an increase of 56 per cent. in about twenty years.

If we test the results of the instruction in our high schools and academies, by the evidence revealed in the examinations for admission to our various colleges, we shall find that there is much to be desired in the arrangement of studies and the quality of the instruction. I quote from the report of President Eliot of Harvard, where the facts regarding the attainments of students upon admission have been investigated with an accuracy and value surpassing any others with which I am acquainted. In prescribed subjects in 1885, 6 per cent. failed in Cæsar and Virgil, 8 per cent. in Latin at sight and composition, 6 per cent. in Xenophon or the Greek Reader, 11 per cent. in Greek sentences and 9 per cent. in ancient history and geography, while 27 per cent. failed in algebra, 6 per cent. in arithmetic, 23 per cent. in plane geometry, 21 per cent. in physics, and 14 per cent. in French or German, and 15 per cent. in English composition.

In elective subjects: 25 per cent. failed in trigonometry, 29 per cent. in solid geometry, 57 per cent. in physics and 23 per cent. in chemistry or botany. These failures were in the English examinations.

The figures are significant; they indicate that a larger number failed in algebra and plane geometry than in the required Latin and Greek.

If we turn to the more advanced elective studies offered for admission, we find some striking statistics. The average number of failures from 1879-84 was: in Cicero and Virgil, about 13; in Latin at sight and composition 22, in Herodotus 13, Greek composition 23, Iliad 10.5, in trigonometry 36, in solid geometry 35, in physics 29.5, in chemistry or botany 16.5 per cent.

If we compare the initial with the final year of this series, 1879 with 1884, we find a manifest advance, which indicates the gradual improvement of the preparatory schools in their preparation for college. These numbers may be taken as fairly representing the character of the preparation of students in one of our leading colleges. The records of the mathematical faculty of Cornell University establish the same general fact, and a careful study of statistics of other

institutions would undoubtedly confirm this result. They show that the increased demands which have been made upon the preparatory schools have been met, and how successful a systematic effort to elevate the examinations and the standard of instruction in the public schools of New England has proved. They show further that the defects in preparation are greater in English studies and in mathematics than in Latin and Greek. A large part of these studies are pursued previous to the study of the classics, and hence the deficiencies in preparation are directly due to our public schools. These subjects are few in number, but they are the essential subjects, whether required as preliminary to a classical or a scientific course in college. If these leading English studies are not taught successfully in our public schools, it becomes a grave question how the time of the pupil has been occupied. In place of disciplinary studies, a variety of light and disconnected branches, pursued for a brief period, dissipates the attention and weakens the powers of the pupil. Compare what is accomplished in a German gymnasium in the same period of time in which pupils are in our public schools. There, the course of study covers nine years, at the expiration of this time the student graduates a thoroughly trained linguist in Latin and Greek, familiar with the best authors and able to quote from them; he is also well-versed in the history and literature of his own language, and in the master-pieces of English and French literature; often well-grounded in Hebrew, and with an excellent training in mathematics, ancient and modern history, the elements of science and philosophy. He enters the university with a disciplined mind, fitted for general and professional studies. Does the American boy of the same age, with his scanty algebra and geometry and history, ignorant often of French or German, or any sound knowledge of Latin or Greek, possess any equivalent for this, either in knowledge or in mental discipline? Seriously, what are the results of the ten years of study, between the ages of eight and eighteen, in our public schools? These are the years of promise, when all the powers are unfolding, when memory and imagination are active, and the young mind aspires after real acquisition. Mathematics is frequently studied throughout the entire public school course and never really completed. By mathematics is meant arithmetic, possibly algebra, and occasionally, parts of geometry and trigonometry. Cannot a skilful teacher in three years, by systematic instruction, impart a thorough knowledge of these branches if pupils are of sufficient maturity when these studies are begun? Why should pupils linger over intricate problems in arithmetic, depending for their proper solution upon a knowledge of geometry, when the essential principles of

arithmetic, all that the man will have occasion to use, can be so easily acquired. The attempt has been made to teach grammar without referring to the historical facts, which are necessary to explain many of the most familiar principles. Has not the time of our public schools been consumed in teaching these two subjects, and yet on entering college the student is often deficient in an accurate knowledge of English, the familiar principles of language, and of mathematics? I cannot refrain from mentioning an evil which pervades all our schools, and which is of so universal a character, that it affects all public school instruction and contributes to imperfect preparation for college; this is the extensive use of popular, but unscientific text-books. There is a great waste of valuable effort in the study of a book confused in definitions and neither orderly nor progressive in arrangement. Akin to this evil is that of using books, too advanced in scope and too extended in detail. Many a youth has spent a half dozen winters on some bulky arithmetic or absurd English grammar. Until within a few years no grammars have had a historical basis. They have attempted to codify the multitudinous uses of common speech by a comparison with one another, or with Latin. To most scholars, all verbs were "regular" or "irregular," until within a short time. "Strong" and "weak" as applied to declensions or conjugations were unknown terms. An accurate explanation of the formation of tenses by additions to a verbal root, or in connection with auxiliaries, is still foreign to the majority of grammars that are sold. The text-books should not aim to be "manuals" or exhaustive, but to present succinctly and clearly the essential principles of the subject. Elementary Latin grammars may possess a scientific statement of principles which will not require change in advanced study. A lack of consistent order in study is mentally confusing and discouraging to the pupil. One scholar, who had completed her academic course, said to me that she had been through three Latin grammars. She did not, however, know one Latin author. Her whole course in the classics had begun and ended with the most barren facts of language. This pupil had been sacrificed to capricious views and to an unnatural method, and this murder of the innocents is re-enacted again and again in the school life of every pupil. The essential facts of language are the same whether studied in English, German or Latin. One statement would express many of the principles common to these languages. Hence the imperative necessity to exercise the utmost wisdom in the selection of elementary text-books. It is a favorable sign that eminent scholars are devoting their attention to the preparation of such works.

A good volume wisely chosen can accompany the pupil as a book of reference in all subsequent study. The same definitions and statements of principles will be fixed in the mind, and that mental uncertainty, which is so fatal to progress and sound scholarship, will not arise. In the Prussian schools, text-books are chosen by the masters with the greatest care; they must then be approved by the Provincial Board, and their introduction sanctioned by the Minister of Education and his Council. The words of Matthew Arnold upon this subject in England are extremely forcible:

"Many as are the absurdities of our state of school anarchy, perhaps none of them is more crying than the book pest which prevails under it. Every school chooses at its own discretion; many schools make a trade of book-dealing, and, therefore, it is for their interest to have books which are not used elsewhere. The extravagance of this is bad enough; but then, besides, as there exists no intelligent control or selection of them, half at least of our school books are rubbish, and to the other defects of our school system we may add this, that in no other secondary schools in Europe do the pupils spend so much of their time in learning such utter nonsense as they do in ours."

If pupils who are preparing directly for college are thus deficient in the few required subjects, is there not *a priori* a strong reason for believing that students, whose attention has been scattered over a multiplicity of minor subjects, have failed to receive adequate culture from these varied branches of knowledge? I recognize the province of the high school as two fold, viz., to instruct the few who are preparing for higher studies elsewhere, and to give a symmetrical training in the essentials of a good education to those whose studies will end with the high school or academy. What may properly be included in a course of study extending through eight or ten years?

Few students who enter college devote more than three years to preparation in the classics. If mathematics can be mastered in three or four years, ample opportunity exists for the study of English, and of French and German. It is a mistake to let the years pass when the child is especially gifted with a verbal memory, without beginning the living languages as well as the classical tongues. Subsequent study will never replace the freshness of impression which is possible in the earlier years.

The modern languages are not only instruments of culture, but of practical value in a country so cosmopolitan in its citizenship as our own. The French and German languages not only contain treasures of modern scholarship and learning, but rich literatures, a knowledge of which is essential to every educated person.

How can the public schools fulfill their duties to higher learning unless the courses of study are simplified, and every subject is taught by a skilful and conscientious teacher, so that pupils pass with trained intellects and accurate knowledge to higher studies, or to the grave responsibilities of life. The German proverb is true in all knowledge, that nothing is so prolific as a little known well. The mastery of a few things gives a consciousness of strength and makes subsequent acquisition far easier. If the public schools owe to the college the skilful and scientific training of their pupils, what do the colleges owe in return to the public schools? It may be that the defects in elementary instruction are due to the divorce which has existed between the colleges and the high schools. The colleges have been independent corporations, governed by boards, which did not recognize their duty to the general school system of the state, and possibly they have failed to sympathize with other educational institutions. The public schools must minister to the demands of the colleges in their enlarged courses of study, or private and endowed schools will see their advantage and claim the province of giving the best training to candidates for colleges.

I regard the lack of sufficient inducements to retain in the profession of teaching those best qualified for their work as one of the gravest defects in our school system.

In Germany the government recognizes and promotes all skilful and accomplished teachers. Many an obscure teacher in a gymnasium wins eminence by his publications. There is an army of silent scholars and workers who are pushing forward the boundaries of knowledge. One defect of all college training has been that scholars have not been taught to investigate. Original study and research in some department of knowledge is within the sphere of every scholar and teacher. Some scholar in his walks may contribute a knowledge of the flora of a remote district to the science of the world. No department of study is locked; all nature stands with open doors revealing wonderful vistas to the thoughtful student. Let no teacher scorn to limit the range of his study to some undiscovered truth and the world will be made richer for his work.

I would recapitulate the points which I have traversed in the present paper.

The examinations held in our colleges indicate defects in our public school system; these defects are found in familiar subjects and not merely in the more difficult, as in the classical tongues. A system of impersonal examinations has certain dangers unless conducted in a broad and scientific spirit and elevated above a mere formal and technical character. The whole school system of Michigan, and in

part of Wisconsin and Indiana, finds its crown in a state university, the requirements to enter which give direction to the high schools of the state. Systematic inspection of schools by thoroughly competent visitors from the office of the Department of Education at Albany would promote a common standard in our high schools and academies. The high schools must meet the just demands of the colleges or their work will devolve upon private and endowed schools. There is time enough in the ordinary course of study in our public schools for the successful study of the classics, modern languages, mathematics, historical English and American history. The evils of our present system are due to a dissipation of attention through a multiplicity of studies. By concentrating the attention of pupils on a few leading subjects, discipline and the mastery of certain great provinces of knowledge are promoted.

I have now to ask whether the colleges by united action can raise the standard of instruction in our public schools. I believe they can, and that their first aim should be to avoid usurping the functions of the public school. If colleges impart, in their first two years, instruction, not superior in degree to that given in our public schools, we have two agencies to produce the same work. The common schools are at a disadvantage; they are robbed of what is their distinctive field. If colleges find their mission in teaching subjects elementary in character, and which can be taught, in accordance with the development of the human mind, better at an earlier period, the high schools have little reason for one portion of their work. The honor of the school system is promoted by recognizing that elementary study, and certain branches of study, naturally belong to our public schools.

A conference of college presidents and representatives of the faculties might be held under the auspices of the Board of Regents to agree upon certain requirements for admission. Let the colleges give up the work of the preparatory schools, some part of which they have been called upon to do from the defects of our public schools, and as in New England, we shall see an advance in the quality and in the standard of instruction in our high schools. Their work will expand as we demand a higher work from them. Teachers will prepare themselves to do this advanced work, and schools will win prominence for the excellence of their preliminary work. Etons and Rugbys will be found in our academies.

Principals of our high schools are discouraged when they see their best pupils slip away when their course of study is incomplete, and find easy admission to latitudinarian colleges.

When the value of vital culture pervades the people, our school system will be pervaded by a living energy, and the education of the immortal intellect will seem worthy of the highest endeavor. When the system of our civil service shall be perfected, so that the people demand special fitness in their public servants, we shall see public employment an honorable ambition, and education, both primary and advanced, recognizing a new province of work in preparing students for the public service.

I regretted greatly when the intercollegiate literary and scholastic contests were given up. There was a healthy vitality in these competitions, and I rejoiced when honors were borne away by the students of remote colleges whose work had been hitherto little known. The work of a thorough and able teacher in some one department has thus become public, and colleges and students feel an incentive to a higher endeavor. A series of undergraduate and fellowship examinations should be held yearly under the auspices of the Regents of the University, and valuable rewards should attach to excellence in different branches. In the former intercollegiate contests, the examiners were, with hardly an exception, scholars of eminence. The papers in Latin and Greek and mathematics were drawn up by scholars whose judgment was accepted as of the highest value. The literary prizes were awarded by men of distinction in letters, as George William Curtis, Thomas Wentworth Higginson and Richard Grant White. It would not be well to limit the judges to scholars of New York, but eminent authorities in special branches from outside the state, should be invited, and should be paid to act as umpires in the award. The prizes should be confined to actual students of colleges in this state. I believe then an honorable rivalry would arise in all departments of learning. Such examinations might cover honors in Latin, Greek, comparative philology and Sanscrit, mathematics, French, German, Anglo-Saxon and historical English, physics, chemistry, special branches of natural history, political economy and history. The fellowship prizes to graduate students should be sufficiently large that those who received them would be enabled to pursue advanced studies either in this country or abroad. Merit would be encouraged, and in a few years we should have scholars trained in the best learning of Europe, bringing back their treasures to enrich our own country. Such scholars would build up our school system, add to the scholarship of our universities, and become investigators who would add to the reputation of the state. The award of fellowship should be based upon examinations, and equally upon meritorious investigations, showing the capacity of the students to pursue advantageously special sub-

jects of study. In addition to the individual encouragement, would be the general benefit to all the 36 colleges of the state, which would become centres of a vigorous intellectual activity and united as parts of a common system. The colleges of the state would realize a part of Hamilton's prophetic vision of separate institutions forming part of one great university, and the University of the State of New York would exert a far-reaching influence worthy of its great name and transcendent possibilities.

The school system of Prussia, which is worthy of the study of every student of education, owes more to Wilhelm von Humboldt than to any other man. In the year and a half in which he was Minister of Education the whole school organization of the country was transformed. A central power exerting its authority alike over the universities, the gymnasia and the public schools, asking and demanding provincial and local coöperation, exact in its requirements and yet allowing liberty within the domain of law, has given rise to a system which is the glory of the German nation. Measured by the German standard, we lack a bureau of central control making its influence and authority felt throughout the state. The mission of such a bureau would be to organize in connection with county and city superintendents, who should be experienced educators and not politicians or place hunters; first, local and responsible boards of control; second, an organized system conveying its authority and its benefits to the smallest hamlet, and controlling private and endowed schools so far as they claimed the benefit of the common system. We should have uniform standards of examinations for teachers by competent scholars, orderly and progressive courses of study, and, instead of anarchy in text-books, such a system as would make uniform our public instruction; in place of the chaotic and the multitudinary courses, the transient whim of a temporary and often inexperienced principal, or uneducated school board, there would be a harmonious system. Scholars removing from one village or city would find at once their appointed place in corresponding schools. Higher schools would be found in the most important centres; uniformity of examinations and systematic inspection would make the preparation for college equal or equivalent, and the most important element in national growth would not be left to chance, but the education of every citizen would become the duty of a fostering state. We should approach Hamilton's original conception of the province of the university, and advance by methods which have yielded the fairest fruit in other nations. Such a system will be found compatible with local liberty and individual rights.

NOTES ON GERMAN SCHOOLS.

BY PROFESSOR JAMES M. GARNETT, UNIVERSITY OF VIRGINIA.

III.

"To-day I heard two *Stunden* in *Unter-Secunda II*, *Oberlehrer* Dr. Bt. The first was in Greek and consisted of translation into German from *Xenophon's* *Hellenica*. I noticed here, as before, that a very small amount is gone over in class, and each boy called on is required to read but a few lines, at most six or eight, and is questioned on this as he completes each sentence. Exactness in translation is required, and here the forms of the so-called irregular verbs were given, ὄρα'ω, ἔρχομαι, etc.; also syntactical questions were asked, and among others the explanation of the use of ἔξοι in a certain sentence, but none of them were equal to that and the teacher had to explain it. He told me afterwards that this was a very inferior class: "*Keine nachdenkende Leute*," as he told them, and that he had had much trouble with it. The next *Stunde* was in the same class, but in Latin. First, an *Exercitium* for translation at home was dictated, and quite a long one; then they were questioned on the syntactical rules relating to the cases and were expected to give them *verbatim* as they stood in the Grammar, and naturally they made some mistakes, and did not please their teacher at all, but he told them they had been over them in the lower classes, and *ought* to have known them. It seems to be the aim in this teaching to leave no gap (*Lücke*, as Dr. S. remarked to me) in the boy's knowledge, and what they have been through in one class they are expected to *know*, and *know thoroughly*, in order to continue the studies of the next class. This seems to be effected by short *Pensa* and *continual repetition*, which continual repetition is enjoined in the school-laws, and indeed it is the only way to secure accuracy of knowledge in boys. I am convinced that we try to do too much, and do not do it well; the best boys in the class may succeed, but the middle-heads are neglected.

"This morning I commenced with *Unter-Secunda, I*, *Oberlehrer* B-d., and heard first a Greek *Stunde*. He questioned his class a little at first on the rules for the syntax of the cases, particularly the Genitive and Dative, but not long, and then commenced the expla-

nation of an *Exercitium* which had been corrected and just returned to the class. The one which I used had three mistakes and one of the boys a little before had *fifteen* (!) The exercise did not seem difficult, and there was not much brought out in the explanations, although the teacher seemed perfectly at home in the explanation of words and constructions that occurred. The boys were also asked to give the Greek for the German of certain expressions, but were permitted to answer from the exercise before them, so that I did not see the object of it. As the exercise was explained, they took down the correct Greek, and were required to make a "*rein Abschrift*" (clean copy) of this and hand it up again. The corrections were not written in the exercise-book by the teacher, which certainly saves time, and requires the boys to attend to the correction in order to make their second copy of it. After the explanation of the exercise, the boys were questioned on the verbs, as in B-t's class, ὁρᾷ ὦ, φημί etc., coming up again. I next went to *Ober-Tertia I*, *Oberlehrer R.*, and heard *Xenophon's Anabasis*, an old friend, and at a familiar passage, Bk. II, ch. 3, *ad fin.* First, however, one of the boys delivered a *Greek speech* taken from Bk. III, ch. 1, one of Xenophon's own speeches, and about two pages long. This exercises the memory and practices on the pronunciation of Greek, but I see no other advantages, for it is easy to commit such a speech without understanding a word of its contents, and I doubt if this boy could have translated it with anything like the fluency with which he repeated it. This *Stunde* pleased me very much, as the teacher was quite active and thorough in asking questions, especially on the constructions, and the boys did very well in their replies. Here also a very small portion was read and re-read before proceeding to the next paragraphs, and stress was also laid on the correct pronunciation. In B-d's class a question was passed among several boys because they said ἰδῶν instead of ἰδὼν in giving this part of the verb. The next hour I returned to B-d's room and heard *Vergil*, *Aeneid*, Bk. III, the prophecy of Helenus to Aeneas. This was simply translation and no questions were asked, but great stress was laid on *exact* translation, and not much ground was gotten over. Dr. B-d told me that about twenty-five lines was generally assigned for preparation at home, and after it had been gone over in class, the boys were requested to make a written translation of it. Here, as in the other classes, the rule seems to be "slow but sure," e. g., in *Unter-Secunda I*, during the last school-year (two Semesters) the amount read was the 7th book of *Liwy*, the four orations of *Cicero* against Catiline, and the first two books of the *Aeneid*. After the hour had elapsed, as this was the close of the lessons for the week, one verse of a

choral was sung, and a short prayer was offered, after which the class was dismissed. I could not but admire the outward respect paid to religion, but unfortunately it does not last longer than while the boys are at the Gymnasia, for on entering the Universities, they seem to cast aside the teaching and principles of their earlier years. There is no lack of religious teaching in the Gymnasia, the lowest classes having three hours a week and the others two,—as much as they have of French or German,—but something must be wrong, when such are the fruits of the tree."

I was at the Gymnasium by eight o'clock this morning, and after joining in the Monday's *Andacht* again, I went to *Unter-Prima* and heard Professor S., the celebrated mathematician. He had evidently just commenced the elements of astronomy with the class, and explained this morning the movement of the earth in its orbit. The book used was an outline for lectures on astronomy by Möbius, and treated of the earth, sun, moon, planets, comets, and fixed stars. He simply gave an elementary lecture on the movement of the earth, with occasional questions, which his class seemed to comprehend very readily. The next hour I went to Professor S. again and heard a *Stunde* in *Ober-Secunda* in *Physik*, or rather chemistry, as the lecture consisted of a series of chemical experiments, principally with iodine, and very well done, the members of the class being asked, after the experiment, to give the compound and the components, and being allowed to refer to the table for the equivalents. The lecture seemed to be a practical illustration of chemical principles. I next went back to *Unter-Prima* and heard a French *Stunde* from Dr. I. He first went over an *Exercitium*, the French of which he had before him, *i. e.*, the book from which it was taken; the members of the class read the different sentences as they had written them, and he corrected them and commented on the usage of different words. Afterwards the grammar was used, and German sentences on the use of impersonal verbs were translated into French, after which the class was questioned on the *Exercitium* with books closed. I examined one of the *Exercitien* and should have expected a rather more difficult one for *Unter-Primaner*; the German sentences translated were also easy. I inquired whether the boys were taught to speak French in the upper classes, and Dr. I. replied: "*ein Bisschen*," so I do not suppose that they carry it very far.

I went to the Gymnasium at nine o'clock to-day and heard first a *Stunde* in mathematics in *Ober-Prima* from Professor S., but he had with him three or four young men, evidently preparing to be teachers, one of whom conducted the lesson. It proved to be an exercise in analytical mechanics on Attraction, involving Geometrical series,

which they had solved, and were required to explain with the work before them in their exercise-books.

The pages referred to in Mehler's Hand-book were those on Geometrical series, but I did not have the opportunity of seeing the application of the formulæ. I examined the hand-book, however, more closely than before. It is entitled, "*Hauptsätze der Elementar-Mathematik*," and the five parts are "*Planimetrie, Algebra, Trigonometrie, Kettenbrüche und Binomischer Lehrsatz, und Stereometrie*." It is a mere outline and useless for instruction without very full explanation. Dr. S. told me it was the only book in mathematics used in the higher classes of this Gymnasium. It seems also to be a curious conglomeration, for exercises in solving cubic equations and equations of the higher degrees, which involve a knowledge of the general theory of equations, follow directly after equations of the second degree. Plane Trigonometry occupies a very small space, and Spherical Trigonometry is a mere appendix to *Stereometrie* or Solid Geometry. The blackboards in the different rooms are small affairs, not much more than a yard square, and seem to be used merely for explanations from the teachers. Also, I have seen no working of examples, or solving problems in class with books closed, but the exercises seem to have been solved beforehand and are explained in class with the work before each boy. The next hour I heard a *Stunde* German in *Unter Tertia II.*, Herr M. Three boys made declamations, one of which was the *Erlkönig*, and then the teacher explained the "*Verhältnisse zwischen Rom und Gallien vor der Zeit des Caesars*," and required the elder boys to give what he had said in their own words. They had been required to read this up in the Preface to *Cæsar (Kranische Ausgabe)*, or elsewhere, but did not seem to have complied with the requirements very well. In the afternoon I returned to the Gymnasium again at two o'clock, and heard a *Stunde* in Sophocles, *Antigone*, in *Ober-Prima*, from Director Ranke himself. They commenced at the Chorus v. 1115, and translated into German, but he spoke Latin with them all the time, asking his questions and making his explanations in Latin. The boys also replied in Latin, but with as few words as possible, usually. The translation was well made, but not without correction, and frequently the few lines assigned to each one were required to be re-translated. Not many questions were asked, and those asked were generally on etymology, the first time that I have heard etymological questions asked, I think. The next hour I heard German in the same class from Dr. I. He first returned an *Aufsatz* (essay) which had been corrected. The theme was the explanation of nine German synonyms, and was quite long,

but in the exercise-book that I saw there was a metrical translation of a portion of Molière's *Misanthrope*, presented, I suppose, instead of the essay. The previous essay of this scholar was on Goethe's "Hermann and Dorothea," and was over thirty pages in length. These essays are written once a month on subjects assigned. The next exercise was the *Vortrag*, or delivery of some piece prepared by the boy (or young man, I should say in this class), who took his stand on the *Cathedra* (rostrum) and repeated what he had written without any gestures and as if he were simply reading it, and indeed it seemed more of an essay or description than an oration. But one youth was prepared, and the others failed when called on, which disgusted Dr. I. very much, and he gave them a pretty severe scolding, after which one boy who had announced himself as partially prepared, on being requested by Dr. I., rose and delivered his essay on Wieland's *Oberon*, repeating the prologue to that poem. He had a good voice and repeated well, but it was no *speaking* or declamation. This was also the case with the younger boys in *Ober-Tertia*; they merely repeated their pieces, and do not seem to have any faculty for declaiming, as with us. These *Vorträge* in *Prima* do not fall to each one more than once in the Semester, and if the result is generally what it was this evening, I do not think they make much out of it. In fact, Herr M. tells me that the instruction in German is the most difficult for the teacher, as it does not present enough difficulty to exercise the scholars' powers, and it is hard to awaken their interest. I notice in the higher classes that the boys do not rise to reply or read, as in the lower classes, and the instruction seems to be more conversational.

I went to the gymnasium this morning at nine o'clock and heard a Greek *Stunde* in *Unter-Prima*, Professor B. He went over an *Exercitium* which had been corrected, but as I had no copy before me, I did not appreciate the *Erklärung* (explanation). Afterwards, however, while he dictated some German sentences to be immediately translated as an *Extemporale*, I obtained a copy and noticed that it was not very difficult, but it seemed a good exercise on the construction of *οὐ* and *μή* for which it was intended. I next went to *Ober-Secunda* and heard the *Odyssey* from Professor B., which pleased me very much. The class commenced the translation at v. 86, Book XV., the reception of Telemachus at the house of Menelaus and the preparation of the feast, and about fifty lines were read, each boy having eight or ten as his portion. Exactness of translation was required, and questions on the verbs were asked, and on the use of the moods. I recollect particularly the Optative in an indeterminate wish and the ways of expressing a

determinate wish. The Professor handled his class and his subject very well ; the boys evidently stood somewhat in awe of him and were very quiet ; here too they were required to stand up when they read, though the others to whom the questions missed were passed were allowed to answer them sitting. The Professor assigned them some seventy lines to prepare for the next *Stunde*, so that more seems to be gotten over in this class than in most that I have visited.

I have not yet had the opportunity of hearing a Latin *Stunde* in *Ober-Prima*, and as the written *Abiturienten-Prüfung* begins to-morrow and lasts a week, I cannot hear one in this class. I have been very much interested in my visits to the Gymnasium, especially in the way particular classes were handled, and have gotten an insight into the way of handling large classes, but when the upper classes contain thirty or thirty-five members and the lower fifty or fifty-five, it is impossible to call on all at one sitting, or even two sittings in the higher classes ; the questions go more rapidly in the lower, but the evil has to be guarded against of boys' not preparing because they do not expect to be called on. The interest of the boys in their work deserves admiration, and especially their readiness to correct any mistake made, as was evinced in the lower classes. I have now heard all the regular teachers in this Gymnasium except Professor Z. and Professor W., who has *Geschichte und Geographie*, but who has been sick for several days.

To-morrow I want to visit the *Real-Schule* under Director R.'s supervision, though it has a special *Pro-Rector*, Professor Strack. This evening I went with Herr M. to the *Lehrer-Versammlung*, or meeting of the professors and teachers of the Berlin Gymnasia and *Real-Schulen*, which takes place every two weeks. Only some thirty or thirty-five were present, and the first exercise was the reading of a paper on the *Turnen-Unterricht* and the comparison of the methods of Spiel and Brodstein, I believe. Next came the event of the *Sitzung*, the remarks of Professor Bonitz of the University, and also Director of the Kloster Gymnasium, on the *Reglement* of the *Abiturienten-Prüfung* with reference to the Greek *Exercitium*, in which he expressed himself strongly in favor of adhering to the present regulation as against certain propositions to do away with the *Exercitium*. *Schulrath* Klix inquired as to whether the style of the *Abiturienten*, their attainment in Greek *Satzbau* and *Wortstellung*, should be strictly noticed in pronouncing a paper "*befriedigend*" (satisfactory) or not. Professor B. explained that there were different degrees of faults in this regard, but he was of the opinion that the purposes of the regulation were carried out in regarding this *Exercitium* simply as an exercise in the *Formen-* and *Modus-Lehre*. In the course of

his remarks he stated that a boy should not leave *Prima* without having read in class, or in private reading, the whole of the Iliad, some plays of Sophocles, and some orations of Demosthenes. Dr. K., while agreeing with him, desired to know why he had left out the Odyssey, for when he was at the Gymnasium, the *Primaner* was required to read all of both the Iliad and the Odyssey. Professor B. said he did not mean to give a secondary place to the Odyssey, but that it was usually read before *Prima* (i. e., partially) and (if I understood rightly) had faults which the Iliad did not have, and especially from an historical reason, the estimation in which the Iliad was held in antiquity as compared with the Odyssey, for, if we examine the works of Aristotle and Plato, we shall find the Iliad quoted more than twice as often as the Odyssey. *Schulrath* G. and Professor B. also made remarks on this subject, when the sitting was adjourned, some of the members, the older ones more especially, remaining to *Abend-brod*. It was refreshing to see the interest these men take in the subject of education, and I only wish we could get up such a *Lehrer-Versammlung* anywhere in Virginia.

I made two visits this afternoon which deserve to be recorded here. First I called on Dr. Wiese, *vortragender Rath* in the Ministry of Public Instruction, for matters connected with the higher schools. He received me kindly and gave me a paper to the Directors of the *Foachimstalsches Gymnasium*, *Gymnasium zum grauen Kloster*, *Wilhelms Gymnasium*, *Cöllnisches Real-Gymnasium*, and the *Gewerbe-Schule*, most, if not all, of which I wish to visit in the next two weeks. He invited me to call after I had visited the schools, and expressed himself as ready to answer any questions I might desire to ask about the schools. I put to him one or two questions, which more properly belonged to the department of elementary education, but he said that was not his specialty, and he did not know so well about those matters.

I next visited Professor Hübner and had a talk with him about the teachers' examination. He is the member of the *Wissenschaftliche Prüfungs-Commission* for examining in *Klassische Philologie*, and he gave me quite a detailed account of the examination. He said that he had no particular scheme of questions or form of examination, but usually took that author whom the candidate said he had especially studied, and he gave me specimens of questions he would ask about Homer, as an example. These embraced the history and criticism of the poems, some account of the principal manuscripts, the labors of Aristarchus, the Wolfian theory as enlarged by Lachmann, and how the two differed; also matters connected with the dialect, how it differed from the later Ionic, and, in gener-

al, when any author was the subject of examination, any questions in grammar, metre, literature, antiquities, history and criticism, connected with the author, were liable to be asked. He also shewed me a pile of dissertations, all in Latin, which had been sent to him by candidates to be examined before their oral examination took place. He himself had assigned the themes months beforehand, and some of the dissertations he had had on hand for six months, there being so many to be examined by the commission here that they had not yet come to these names. He stated that the commission here had usually one hundred and twenty or one hundred and thirty to examine every year, and they gave every Monday from 4 to 9 P. M. to it, during which time he got through with three or sometimes four a day; the commission in Breslau had about sixty a year to examine, those in Bonn and Göttingen about fifty each, and so on. He read me the titles of some of the themes, all on classical subjects, and also read his *Protokoll* (report) of the examination of one candidate recently, and the *Zeugniss* (certificate) which he had attached to it. He had found this candidate deficient in preparation and was not satisfied with his treatment of the theme, and had given him a certificate of qualification to instruct only in the middle classes of the Gymnasium, i. e., not above *Unter-Secunda*. Strangers are not permitted to be present at these examinations, and he said he generally held them as *tête-a-tête* conversations, though in some places it was customary for them to be held before all the members of the commission, but here they had so much to do that they were all examining at the same time in different parts of the room. He gave me a copy of the regulations for the examination, but they can all be found in Wiese's second volume of "*Verordnungen und Gesetze*." I was much interested in this talk, and got a pretty good idea of the teachers' examination in Classical Philology and of its difficulty. Professor H. gave me cards of introduction to Professor Bonitz and *Stadt-Schulrath* Hofmann, under whom are all the *Städtische Gymnasia* and *Real-Schulen*. Dr. W. had also given me a card to *Schulrath* Klix (whom I heard last night), who is President of the *Wissenschaftliche Prüfungs-Commission*.

*THE TEACHING OF LATIN.**

PRINCIPAL WM. T. PECK, CLASSICAL DEPARTMENT, PROVIDENCE
HIGH SCHOOL.

The character of the teaching of Latin in the secondary schools of the country is largely determined by the colleges. This is not to assert that the conclusions of the college are not influenced by the earnest work of enthusiastic teachers in the schools, by the text books they prepare and opinions they express, and by the utterances of those who are testing in practical life the value of the instruction they have received. It might be an interesting, but it certainly would be a difficult task to find the earliest influence leading to any change in the character of the instruction in Latin. Still, whether these influences come in a greater or less degree from within or from without, the college decides upon the character of its instruction and determines the conditions of admission. It is to be taken for granted that these harmonize, that the conditions of admission and the questions for examination reveal indirectly the character of the instruction in college and directly the preparation desired for that instruction. The function of the so-called preparatory schools is certainly to prepare students for college. If the conditions and examinations for admission reveal what I have said, then the teaching in the preparatory schools must be largely determined by them, if the pupils are to have the best preparation for what the colleges offer. The elementary books and commentaries brought out for the use of the schools are designed to promote in the best way this object. The same works are naturally used by teachers of Latin in schools of every kind, and thus the conditions of admission to college and the character of examinations direct the general trend of the teaching of Latin in all our schools. It is well for us then to watch the changes in the requirements of the college and to see if our modes of instruction have the same object in view.

If we compare the last catalogue of Brown University with the one issued five years ago, and that again with the one of eight or ten years before, we shall notice in each comparison great changes in the requirements in Latin. During the earlier period the change consisted principally of a large increase in the amount of reading required and resulted in adding a year to the work of most preparatory schools, but it involved no essential change in the character of

*A paper read before the R.I. Institute of Instruction and printed here at the request of N.Y. teachers.

the work performed. The change in the last five years, however, is one affecting the character of the work. Let us examine the subject carefully in detail. The amount required to be read in Cæsar, Salust and Vergil is the same. Ovid is reduced from 3,500 to 2,500 lines, and Cicero from seven to five orations. But to offset this we find :— “ Translation, at sight, of ordinary passages from Cæsar, Cicero's Orations, Vergil's Aeneid and Ovid's Metamorphoses, with questions on grammar, prosody, history and antiquities, suggested by the passages assigned.” Also instead of definite lessons from a Latin composition, we find (1) “ Translation into Latin of simple English sentences and (2) Translation into Latin of a continuous passage of English narrative, prepared from some portion of the prescribed prose.” Finally we have the Outlines of Roman Geography and History.

From this it would seem that the college desires not merely the careful study of certain selected extracts from the great masters of Latin prose and verse, but the ability upon the part of the student to translate other writings of the same authors which he has not seen before, to apply the principles of grammar, and to have such a comprehensive view of history and antiquities, including, of course, mythology, as to explain at once the various allusions.

In regard to Latin composition it would seem that the ability to write detached sentences from committed vocabularies in order to illustrate grammatical principles is not so much sought, as really to write Latin in a connected way after the model and upon the subjects of the authors studied.

This is a great change and one involving fundamental principles. The former way sought to know what a pupil had done, the accuracy and thoroughness of his work, and the power of his memory to retain knowledge, the latter seeks to know what a pupil is able to do. The former looked upon Latin as a means from which innumerable lessons of culture could be drawn, the latter regards it as an end to be sought before it can become a real means. To learn Latin and not something about Latin seems to be what is desired. The classical teachers in this section of the country have now been working under the new conditions for a few years. May it not be well for us to survey carefully the various parts of our work, to examine our methods and consider our difficulties in order that through deeper thought and wider discussion we may make some advance towards the end that we seek.

Naturally the first question is concerning the way in which we shall begin our work. Here we see that the questions concerning the study of the ancient and modern languages are coming nearer

together. None would say that we should begin with the theory, that a large part of the Latin Grammar should be learned before commencing with the languages as many of us were taught not long ago. On the contrary we expect to enter at once into the language from the very first lessons. The editors of our text-books have brought out various editions of their works to meet this end, until the last book upon my table, that of "Collar and Daniell," published this September, announces as its plan the maximum of practice with the minimum of theory; while a book recently issued from Macmillan's, in London, and edited by A. M. Cook, consists of little more than an almost endless amount of sentences to be turned from English into Latin and Latin into English, arranged, however, upon a philosophic and progressive plan.

Practice is certainly what we need, but what kind of practice? That which comes through the ear and eye, and is expressed by the voice and pen. We know that it is possible for a student of a foreign language to become able to translate rapidly and well from the printed page, while he may be hardly able to pronounce the words, certainly not to read aloud intelligibly. It is also possible to train the ear and to make use of the sound to assist in getting the thought when reading. This may be done without acquiring the ability to talk. Thirdly, one may learn to think in the foreign language and so be able to talk and read as in one's own. The teachers of modern languages do not yet seem to be agreed as to the methods to obtain the latter result in the class-room and so it surely cannot be expected of us. Ought we not at least to aim for the second position, to employ equally the two roads to the mind, the ear and the eye? Should not ultimately the reading of Latin aloud be something more than a practice of the rules for pronouncing Latin? Ought not the ideas to be appreciated with the reading of the words? It seems to me that this aim is naturally set up from the requirement to read Latin at sight. We should train the ear from the beginning and should continue to train it. The exercises should be heard without the use of the book on the part of the scholar, not only from English into Latin, but from Latin into English. They should be so simple at first that they can be rendered at once and the practice and drill should be such that the scholar, as he goes on, will have some power and freedom in the language. Care should be taken that they are not mere rote exercises, but the teacher should give innumerable sentences formed from the same words, both in English and in Latin, to be translated at once without preparation. This will require ease in the use of the language on the part of the teacher.

In this part of the work it is important to secure two things, a knowledge of the inflections and a vocabulary. How few pupils learn the force of the inflectional endings! When they translate, they get out the meaning, after consulting the notes and dictionary by putting together the English words in the way it seems best for them to go. An active or a passive ending, a mode or a tense sign, the mark of a dative or ablative, produces little effect upon the mind of the student. Yet how important this is. What appreciation can there be of the language without feeling the force of the inflections? To be able to do this, it is not enough to decline a noun or inflect a verb, however quickly. There must be such a drill of all forms *in sentences* that their signification shall be known and felt. A pupil who feels that the endings give additional ideas to the words and understands them at once, is on the road to sight reading. But we need to build up a vocabulary, as well as to have power with the inflections. Here is a point that it seems to me has been much overlooked. Have the authors of our text-books worked as hard here as they might? The vocabulary for an exercise should be small, but every word should be used until it is well known. These words should be repeated in subsequent exercises and kept constantly in practice, while others are added in small numbers. Thus in time quite a vocabulary will be acquired that the pupil really knows. A professor of Latin in one of our New England colleges says that the student should go directly from the symbol *mensa* to the idea, not via the English word table. This may be the ideal, but I have my doubts that it can be attained to any great extent in actual work with *large* classes. But certainly a good vocabulary should be secured and words should be so perfectly learned and so repeatedly used, that spoken or read, they should immediately suggest something, whether the idea itself or the English name for it. The words of relation and connection that are used so often are of especial importance. When the proper time has come, the roots and formation of words should be studied, the force of affixes and suffixes should be mastered. Large numbers of words could then be added to the student's vocabulary and his ability to read would be greatly increased. As the pupil learns to read let him seek for permanent additions to his stock of words, let him be taught not to look up again and again the same word in the dictionary, but let him get the words by heart and such exercises be prepared for him as shall secure a use of these words. Perhaps I have said enough about the securing a vocabulary, but I want to impress its importance, for I believe it is vital to our work all along our course. How can we expect our pu-

pils to read at sight or to write Latin unless they *know* the words of the language.

Upon the first part of our work it seems to me that there would be a very general agreement, but how we shall proceed after we have begun to read the required authors presents problems still to be solved. Shall we now give up our daily oral practice from Latin into English and English into Latin—our daily writing also? This is what we have done. Under the old plan, that of fitting the pupil upon his required amount in Cæsar, Sallust, Cicero, Vergil and Ovid, when the requirements were so great, it seemed that we were obliged to do so, except the insertion of one lesson a week in Latin composition from books designed principally to teach the syntax of the languages. But this will not do now. We have tried to meet the difficulty by changing the methods of teaching Latin composition, so called. If a teacher had but very few scholars, it would be necessary to have but part of the passage for the day parsed and analyzed, and he could spend a portion of the hour in oral and written drill upon the text for the day, but in classes where only four minutes or less can be given to a pupil, the whole hour is necessary for instruction on the reading of the text. It seems as if the ready use acquired in the earlier stages would now be lost from want of practice instead of greater facility being secured. Who would not say that the student of Latin ought to write in it every day? As I have considered the little grasp that our pupils as a whole have of Latin, I have sometimes thought that it would be better to continue the methods of the first year through the second with a systematic plan of getting the language and then reading the authors rapidly, when we really could read, during the last two years. Others are considering this same difficulty, the lack of opportunity to get in sufficient practical work. The Professor of Latin in another of our New England colleges informs me that the faculty are considering the advisability of diminishing the required amount in Latin in order to give more time to the schools for sight reading. Perhaps this would remedy the difficulty, but it should be made evident at once by the college examinations that this was no real reduction in the college requirements, but an advance, that ability to read was to be really insisted upon. Also the character of the instruction to follow should be upon the same basis, for it really affects the work of the preparatory schools. The college has the right to decide whom it shall receive and, if it wishes to admit young men of suitable age who have had limited opportunities for preparation, there can be no objection. As it teaches the elements of German so it may give elementary instruction in Latin. But the divisions should

be so arranged that those who wish can go on directly from the standard set in the requirements for admission, so that at the close of the college course they may have made a broad survey of the Latin Literature and feel at home in the works of any author. This would encourage the preparatory schools in their endeavor to meet the requirements the college now presents. If more time was allowed for sight reading easier authors than Cæsar might be used at first, in which large amounts might be read and facility secured before attempting work with Cæsar and Cicero. As the requirements are now, it seems feasible to have sight reading once a week during the last year and a half of the preparatory course. Some lessons in history, written exercises or passages to be committed to memory (an excellent exercise, by the way), can be assigned in order that the pupil may have something to do before the recitation. In the recitation of the unprepared lesson, while at first much less ground can be covered than with prepared work, there is a greater opportunity for real teaching, especially in the case of the poor scholars. The difficulties of the students can be ascertained, the correct way of studying and looking at Latin sentences can be taught, the derivation and composition of words, the force of roots, stems and endings can be made apparent. After a few years of trial I would by no means give up oral unprepared lessons, but if time allowed I would have more of them. Another way of accomplishing this sight work is by written examinations. While the occasional writing of the translation of the lesson for the day will secure accuracy of expression, I deprecate that style of written examination upon the work of a certain period that will occasion cramming on the part of the student. An examination upon a passage that the student has not seen before will prevent this, while it will bring new lessons to him and fit him for future work. Great care will be needed in the selection of the passages, and the meaning of words not known before can be given, if they cannot be derived or inferred from the context. Questions upon the etymology can be asked, but fewer questions will be required in syntax as the mere translation will more fully reveal the knowledge of that subject than in a prepared exercise. The sight examination carried to the full extent that the teacher's time out of school will allow, is one of the most valuable means of giving the scholar a firm hold upon the language.

Latin composition next claims our attention as a means towards our desired end. No part of our work is more important or more difficult, and in nothing do we hear of so much criticism from the colleges. From the point of view from which we are now looking at the teaching of Latin, the composing in the language is justly re-

garded as a test of the success of our work. The course should include a thorough and systematic drill in the essentials of syntax, in the common idioms of the language and in the vocabulary of the required prose. I think there should be a text book employed lest, if the teacher works entirely from his exercises, the work should lack the necessary breadth and system. In the use of the exercises in the text-book, my experience is, that it is not the best method to have all the sentences written out by each scholar to be corrected by the teacher and then committed to memory; for the scholars write directly from the vocabulary and models and with the help of others, and it is much easier to learn the sentences by rote than to call up the words and put them together as the thought requires. The sentences, of course, must be written on the blackboard that all the class may see and correct the work. Here let me say that there would be a great saving of time if in all our exercise books the lesson, models and vocabulary were in one part of the book and the sentences in another, so that it might be possible for the student to take his book with him to the board. But this writing on the blackboard is not sufficient, for one pupil can do but little, and he is apt to spend a long time upon his work. The plan that I have found to work best for the advancement of the pupil is to give out three or five sentences to be written on paper in Latin, without writing the English, in *as many minutes*. They may be taken from the advance or review lesson according to the progress of the class. I regard such work of more value than almost any part of the recitation. It secures quickness and ability to do.

Another exercise that has proved itself of special value is to assign with the regular lesson a few pages of Cicero to be looked over, and in the last fifteen minutes of the hour give to the class upon the blackboard a connected passage founded upon some part of that assigned, which shall be turned into Latin in the specified time. Again, occasionally a passage in English to be turned into Latin out of school can be given, in order that, by a careful study of the dictionary and grammar, greater accuracy may be obtained in the use of synonyms and the expression of the thought. Roger Ascham, the teacher of Queen Elizabeth, long ago pointed out perhaps the most valuable of all methods of learning to write Latin. Let me quote his own words:— “After this, the child must take a paper book, and, sitting in some place where no man shall prompt him, by himself let him translate into English his former lesson. Then showing it to his master, let the master take from him his Latin book, and pausing an hour at the least, then let the child translate his own English into Latin again in another paper book. When the child

bringeth it turned into Latin, the master must compare it with Tully's book, and lay them both together, and where the child doth well praise him, where amiss, point out why Tully's use is better." While we undoubtedly have made some use of this method, it will probably be used much more in the future. One of the newest books in Latin has exercises under the title of *Recomposition*, and a paper read before the Regents of the University of the State of New York and reported in the *Journal of Education* says :— "That all translations should, to a considerable degree, be double,—first into English, to give the student a more thorough mastery of that language ; and second, into Latin or Greek, to give familiarity with the grammar and idioms of these languages."

Thus the newest way and the old way have come together, and yet not without some advantages from the road over which we have passed. That would, indeed, be a poor philosophy of education that would have us cut loose from the immediate past and begin at once *de novo*. The accuracy of work and breadth of view by which the Latin text became a basis for lessons in almost every direction, the methods of Dr. Taylor of Andover and many other noted teachers, these are not to be lost. Grammatical accuracy in etymology and syntax will be secured by Latin composition; and if long lists of words, without meaning, are not now required to be committed to memory, especially words not found in the preparatory prose and not used in our exercises, are we not proceeding in a more rational manner and making the way for our pupils more pleasant. With regard to the breadth of the teaching and general culture, this is assuredly not to be lost with the new objects. I have on my table the admission examination questions in Latin for this year of Brown, Harvard, Yale, Amherst and Boston University, and when before was so thorough a knowledge of Roman History and Geography required? The most recent text-books from the press vie with each other in their illustrations of antiquities and their literary criticisms. Their vocabularies come weighty with word-derivation and word-building, while photography by laying before us the very scenes of our study in graceful beauty, through a temple or an arch, a piece of sculpture or a household utensil, throws light upon the meaning of many a passage and gives life to the actions of a remote past.

It is not because I do not regard as of the greatest importance the educational advantage and culture derived from the study of Latin that I have devoted so much time to the discussion of the difficulties of acquiring the inflections, building a vocabulary, sight reading, sight examinations, and the writing of the language, but because the mastery of these difficulties will aid us in enlarging these advantages.

To bring the dead language to life, to give to the immortal works of the great masters of Rome that power which they had when they expelled a Catiline, or persuaded a judge, or plead for the pursuit of literary studies, when they charmed with graceful rhythm an Augustus or Maecenas, or fell in sorrowful, but melodious verse from the exile in the wilds on the Euxine, to cause others to learn to know and to love Latin as the divine singer of the Middle Age, followed the Mantuan bard through other worlds, to do such things as these is the ideal which the changes in the objects of our teaching seem to set forth as possible.

We have seen year by year the minds of the students expand under the influence of these studies ; but, when the school and the college, by following the road already entered upon, shall give the student such a grasp of Latin that it shall be to him a living language, not only shall we regard the study as one of the best means of disciplining and developing the mental powers, but we shall expect to secure such a knowledge of Latin that it shall abide and continue a permanent source of culture throughout the entire life.

MASSACHUSETTS STATE TEACHERS' ASSOCIATION.

The high reputation of Massachusetts teachers was in some ways hardly justified by the recent meeting of the State Association. (Boston, November 26 and 27.) A small proportion of the teachers within an hour's ride of the meeting was present. Much of the talk from the platform was emotional rather than practical. Two of the leading papers were presented by teachers from other states, and these papers ranked with the best of the meeting. The management was painstaking and energetic, but some of those who occupied places on the programme, evidently felt that almost anything would do, as long as they filled up the time allotted. We speak in all kindness and without personal feeling, but we have no patience with any one, college president or common school-master, who does not think his fellow-teachers worthy of the best thoughts of his best hours.

We missed the opening paper on Alcohol and its Effects on the Human Body. Dr. Duryea's Address on Moral Education in the Public Schools was pleasant to hear, but it could not be said to add anything new to what has already been spoken and written on the subject.

From a report of the meeting, in the *New England Journal of Education*, we learn that Miss Freeman, President of Wellesley College, read a paper on The Responsibilities of Educated Women. We were not fortunate enough to hear that. We listened for an hour, however, to an off-hand talk by Miss Freeman on a variety of subjects. She complimented Dr. Duryea very highly, read extracts describing a school exhibition eighty years ago, gave statistics regarding men's colleges, and deplored the "wicked folly" of Mrs. Lynn Linton, some of which she quoted. We do not know that the Responsibilities of Educated Women is a subject of much importance, but still we should have been glad to hear it treated by so able a woman as Miss Freeman.

Supt. Balliet, of Reading, Penn., honored himself and his audience, by reading a carefully prepared paper on the Nature and Development of Sense Perception. He placed the study of Drawing on a tenable footing and justified its retention in courses of study by arguments very different from the shallow talk of many advocates. It is to be hoped that this paper may be published in full. We hesitate to pronounce judgment on the treatment of so difficult a subject after a single hearing, but our impression was altogether favorable, and we should gladly read the whole more at leisure.

The work in the sections seemed to us better than that in the general meetings. Prof. Kellogg, of the Brooklyn Polytechnic, read an exhaustive paper on Latin in our English tongue, in which were embodied the results of much labor and which seemed thoroughly appreciated. Some of his illustrations were specially felicitous, as when he compared the Saxon word to the row-boat, and the Latin word to the ocean steamer. The row-boat may be oftenest used, but the steamer is indispensable when we must cross the ocean.

Mr. Thurber's paper on Some Features of Secondary Teaching in Europe, was a model in every respect. It summed up briefly and clearly the results of much patient and wide reading. It was written in a happy vein, presenting without bitterness or exaggeration a wide view of a subject which few men are competent to deal with. It was read modestly and without pretence. A teacher who bestows upon his fellow-teachers the compliment of devoting to them his best research and his mature thought, honors himself not less than his calling.

Mr. Daniell, of the Chauncy-Hall school, was interrupted by the darkness in the midst of an enjoyable paper on Quantitative Pronunciation of Latin, the best of the ten minute papers to which we listened.

Supt. Marble, of Worcester, in the Grammar section, spoke of the Presumption of Brains. In view of the well-known fact that the lower the grade of intellect with which the teacher deals the more elaborate must be his method, it seems to be a fair inference from the elaborateness of methods used that many teachers have come to feel that the minds entrusted to their charge are of inferior quality. The old lack of method at least presupposed that the mind had inherent power enough to grow even with little assistance, with occasional direction. Much in our present methods implies that there is no such inherent power in mind, but that not only must the assistance be constant and officious, but that it can be regulated even in its minute details. Mr. Marble's plea for the presumption of brains in both teacher and pupil is timely and suggestive.

A LAYMAN'S VIEW OF PUBLIC EDUCATION.

Mr. Louis Miller, president of the Board of Education at Akron, Ohio, is one of the few business men of our acquaintance who are thoroughly interested in education. He has devoted to the subject much time and thought. He is emphatically a man of affairs, keen to observe and quick to generalize, a thorough master of practical problems, with genuine appreciation of the ends sought. For all these reasons we read with interest, in his address before a recent meeting of teachers at Akron, "A Layman's View of Public Education." We commend this address to all teachers, because it presents the views of an honest, practical, successful man, who has given genuine thought to a subject which most people seldom study.

Two points in this address will bear comment. In discussing the amount of time required for the best possible preparation for life work, as at present arranged, Mr. Miller says: "For exclusively family training, six years; primary, eight years; secondary, four years; superior, four years; special, two years; apprentice, three years; total time of preparation, twenty-seven years; leaving six years of the average life of man to live." Admitting the time devoted here to each part of the preparation, we still must dissent from the remark "leaving six years of the average life of man to live." The greater part of the human race die before they reach the age of twenty-seven. It is therefore manifestly unfair to count in the average life of those who reach that age the large number who perish in infancy or early youth. The man who reaches the age of twenty-seven has an average life to live equal to the expectancy of life at that age, and this expectancy, as shown by the tables, is 36.56 years.

The closing paragraph of Mr. Miller's address is very happy.

"In our arts, we say to the artisan: 'A carriage is desired that weighs but eight hundred pounds, which shall carry six persons with as much safety and assurance to the persons carried as the carriage formerly weighing twelve hundred pounds; can

you do it?' The carriage maker will shrug his shoulders and twist his face, and turn to his skilled mechanic and get a response which will enable the proprietor or manager to say, 'we can try.' The purchaser says, 'But I must have the carriage for one-third less money than the price of the twelve hundred pound carriage.' The carriage maker again shrugs his shoulders and twists his face and turns to his skilled foreman, who says it will require a re-arrangement and increase of machinery with increased rapidity. 'If this were done you might make the promise.' The proprietor or manager will turn to the purchaser and say: 'How many will you need?' 'Two hundred and forty thousand at the price named!' The eyes open, the face brightens, and the response is made, 'I will do it.'

To put the matter in other words, we understand Mr. Miller thinks there should be the same progress in education as in other arts, that the advance of civilization and the perfection of methods should enable us to present better results with less expenditure of time.

We might entirely escape Mr. Miller's conclusion, did we so desire, by reminding him that carriage building is a very different thing from training mind and forming character. But we do not care to make that suggestion, first of all, because we know Mr. Miller fully recognizes the difference, and secondly, because we would like to point out that he, and other business men interested in education, can not hope to find such results in education as in business, until business methods are employed in education.

To continue the illustration, if the skilled foreman mentioned above knew that he could neither select nor discharge his workmen, that any stock-holder, no matter how insignificant, was able to interfere with and seriously modify his plans, that he could not fill his shops with the best workmen, but must first of all take care of certain men who had claims, that the raw materials would be selected with little regard for quality, would he not be not hesitate before assuring the proprietor that he could do the desired work? To make for two hundred dollars a carriage weighing eight hundred pounds as strong and safe as one weighing twelve hundred pounds and costing three hundred dollars, requires that there shall be no idle or unskilled workmen, no useless machinery, no antiquated tools.

Not long since a gentleman from the East, talking about a man who had recently been discharged from an important position in a large manufacturing establishment, remarked, "He was a gentleman, a Christian, a most agreeable man to meet socially and in every other way, and he understood machinery. There was only one point in which he was weak: he never realized for a moment while he was with us that the whole object of the Salmon Creek Mills was to manufacture cotton cloth at a profit to the stock-holders."

The American public, as far as education is concerned, at the present time occupies a position not dissimilar from that of this worthy agent. We have never yet seen a community where it was generally felt that the object of schools from beginning to end is to teach and train children. We have never found a system of schools, perhaps we have been unfortunate in this respect, where ability to do the proposed work was the only requirement of a teacher. We do not know a city superintendent in all our acquaintance who could either peremptorily dismiss an incompetent teacher or readily procure the dismissal of a teacher of good character, simply on the ground that the teacher did not do her work. We do know super-

intendents, not a few, who would lose their places if they made a real effort to get rid of all incompetent teachers.. We do not place the blame of this on the boards of education, because it does not belong there. The boards are elected for a specific purpose, which is understood not to be to secure the best possible schools. Frequently when the board of education determines on the dismissal of a teacher confessedly incompetent, the general public rises in defence of the teacher and overwhelms the board with importunities. At such times the board is made to feel that it is acting directly contrary to the wishes of its constituents, if it proceeds to remove a teacher simply on the ground that she cannot do her work. Nor is this pressure confined to pot-house politicians and the ignorant portion of the community. We have personally known some of the wealthiest and most influential men in a city to sign a petition for the retention of a teacher practically on the ground that she was too old and too feeble to do anything else, and that if she was not retained by the board she must go to the poor-house.

We do not confound carriage building and mind-training, and we know Mr. Miller does not confound them, but in one respect we think they agree, and that respect is that the attainment of the best possible results, in either case, necessarily requires singleness of aim. If he will show us a place where carriages are made at a profit, and yet where the foreman has the power neither to hire nor discharge workmen, he will find a place where the foreman labors under the same disadvantages which now beset every superintendent and every governing board in our public school system. In Mr. Miller's own state, if current opinion be correct, the interests of the children are, as a rule, subordinated to the interests of the publishing houses. It would be a rare thing to find, so far as our acquaintance goes, a school where, in everything, the interests of the children are the first consideration. The parents would not allow it, the general public would not allow it, and consequently one great stimulus to the best work in our schools is lost. That there are occasionally exceptions, we readily agree.

It goes without saying that the man who is not able to tell a competent teacher is unworthy to be at the head of a school or a system of schools. There is no alternative. Either the superintendent should be sustained or he should be discharged, and one put in his place who can be sustained. If we are to have really efficient work done in education, such as we require in all other work except, politics and government, the head of the system of schools should have at least as much authority as the foreman of a machine shop. Because greater interests are entrusted to him, he should be selected with greater care and held more entirely responsible for the result.

There are, however, few cities of our acquaintance where the superintendent and the board of education have been selected with special reference to their real fitness for their positions. Extraneous and irrelevant considerations usually affect the choice. If our business friends and the general public would be willing to try the experiment—and we think it well worth trying—of selecting in any given place the best possible man to put at the head of their schools, as a great manufacturing establishment selects its manager, and then should say to him "We want the best possible results in mind-train-

ing and character-building. If you can furnish these results, we will ask nothing else of you and place no obstacles in your way. If you cannot furnish these results, you must give way to another man," we should see a result in the course of years not less satisfactory than the same course of action brings about in other departments of work. Is there any community that cares to try the experiment?

NOTES.

THE ACADEMY is mailed to all subscribers promptly on the first of the month. Subscribers should inform us if it is not received within two days of the time when it ordinarily reaches them.

A. Lovell & Co., have issued a cheap edition of Froebel's Education of Man, at the price of 65 cents per copy by mail. The edition in cloth is still published at \$1.30 per copy.

The delay in issuing the present number was caused by our desire to give the official report of the Holiday Conference. It has proved impossible for us to print this report without greater delay than we think wise, and so we reserve it for next month.

D. C. Heath & Co., Boston, have in preparation Compayré's "Lectures on Pedagogy: Theoretical and Practical," a companion volume to Compayré's "History of Pedagogy," translated and annotated by Professor Payne, of the University of Michigan.

In a lecture recently delivered before the teachers of Worcester, Massachusetts, Dr. G. E. Francis, a reputable physician of twenty-five years' practice, made the rather alarming statement that the increase of nervousness among children is great enough to be noticed in very short periods. Comparing the present with five years ago, he finds the increase apparent, as it also is when five years ago is compared with ten years ago. Dr. Bemis, an expert of high repute in nervous diseases, pronounces this statement of Dr. Francis undoubtedly true. Neither of these gentlemen lays the blame at the door of our school system; indeed, Dr. Francis expressly said, that in his own practice he had never had a patient for whose illness he thought any teacher could be justly blamed; but the views of these gentlemen are entitled to careful consideration at the hands of teachers, who will do well to see that their skirts are entirely clear of blame in this matter.

We commend to our readers without reserve the article in the *Andover Review*, by Prof. G. H. Palmer, on the "Possible Limitations of the Elective System." Not that we agree entirely with the writer in his conclusion or accept his arguments as conclusive. But his whole paper is written in a happy spirit, he speaks frankly and openly without dogmatism or over-weening confidence. One feels that he can differ from Prof. Palmer's opinions without losing caste, and that the Professor could see his views controverted without los-

ing his temper. Altogether the question seems to be discussed in a right spirit. We believe the group system presents advantages which do not appear to Prof. Palmer, and that the ultra-elective idea has defects so radical as seriously to mar its value. We recognize the weakness in each of the systems of checks mentioned in this article, and wait with much interest for the development of the author's scheme promised in a second part.

The first number of "*Le Français*" *redivivus*, bearing date January, 1887, has appeared. Mr. Jules Lévy, its founder, now appears in the subordinate role of contributor, while the responsibilities of editorship are assumed by Mr. Jean de Peiffer. Under the new regime the paper retains its former appearance, nor is any marked change in its general character noticeable. Easily the most important and interesting portion of reading-matter is the article of Mr. Lévy entitled "*Chronique*." The other articles have no special quality to commend them. The pedagogical matter, however, is such as should interest every teacher and learner of French. Students who have no teachers will find in the *examen mensuel* the means of self-drill and self-criticism in matters of idiom, such as cannot be got hold of in any other way. Questions of pronunciation and questions of grammar are clearly discussed, and rhythmic also is to be treated in the future. The paper has a unique value for teachers, and should be supported.

The publication of Nohl's *Paedagogik für höhere Lehranstalten* has reached the end of Vol. II. The first volume, as readers of the ACADEMY will remember, treats of the institutions of secondary education themselves, proposing great reforms in the organization of these schools, generally in the line of what is now the most marked tendency among German educationists, viz., the tendency towards unification of the complex system of *Bürger-schule*, *Real-schule* and *Gymnasium*.

The second volume, a book of 577 pages, discusses the methodic of the several studies (*die Methodik der einzelnen Unterrichtsgegenstände*.) The studies treated are Religion, German, French, English, Latin, Greek, History, Geography, Natural Sciences, Mathematics, Art, Drawing and Music. As we purpose hereafter to give a fuller account of Nohl's Methodic, we say here merely that whoever desires to follow a discussion of similar range on the topics of secondary education, must do it in German. Keen as is the professional interest of American high school and academy men, it does not express itself in this manner. We are perforce Germanizing our pedagogy, because every thoughtful pedagogue must of necessity put himself into relation with German thought, the moment he begins to think at all exclusively on his work.

In the *Zeitung für das höhere Unterrichtswesen Deutschlands* (Leipzig) we find an article reproduced from the *Tägl. Rundschau*, Brunswick, on the recent changes in the conditions of admission to Harvard. The writer cites the new requirements with cordial approval, but seems to regard Harvard as a late accession to what had become the general American university principle of making an ancient language optional.

Just as we quote German facts to fortify our opinions, so this German writer adduces his assumed American conditions, to show how the ancient languages thrive where perfect freedom of choice exists as to whether they shall be studied or not. The truth in regard to American matters generally seems very hard for foreigners to learn. We should have said that hitherto *fitting for college* almost universally meant in this country studying Greek and Latin, and that Harvard was conspicuous among the innovators in respect to the position of these languages.

Assuming, however, that the study of Greek and Latin has long been voluntary for American college students, the writer of the article referred to quotes the statistics published in the June *ACADEMY* showing how Greek and Latin have thriven in this country, and then points his moral by showing how small is the danger that the ancient languages will decline when artificial support is withdrawn from them. All this is interesting as showing that there exists in Germany a desire for freedom of choice of studies in the higher education.

To what extent students in this country have unwillingly taken Greek, being constrained by college requirements, may in the future be inferred from the tendency that may be developed, now that Greek is made optional, to omit that language. In the only school we know of that has promptly met all the possibilities of freedom offered by the new Harvard requirements a very promising nucleus of an hellenic candidates already exists.

BOOKS RECEIVED.*

Papers in Penology. Reformatory Press, Elmira, N. Y. 1886.

Questions in Anatomy, Physiology, Hygiene. Part I. Schools and Families. D. C. Farr, A. M.

The Education of Man By Friedrich Froebel. Translated by Josephine Jarvis. New York: A. Lovell & Co. 1886.

Our Government. How it Grew, What it Does, and How it does it. By Jesse Macy, A. M., Professor of History and Political Science in Iowa College. Boston: Ginn & Company. 1886.

Outline of Lectures upon Political Economy, prepared for the use of students at the University of Michigan and Cornell University. By Henry Carter Adams, Ph. D. Second Edition. Ann Arbor. 1886.

Topical Outline of the Courses in Constitutional and Political History of the United States. Given at Harvard College in the Academic Year 1886-87. By Albert Bushnell Hart. Part I. (1783-1829). Cambridge: W. H. Wheeler, Publisher. 1886.

The Elocutionist's Annual. Number 14. Comprising new and popular reading, recitations, declamations, dialogues, tableaux, etc., etc. Compiled by Mrs. J. W. Shoemaker. Publication Department. The National School of Elocution and Oratory. Philadelphia. 1886.

* Any of these books may be more fully noticed hereafter.

The Song of Roland. Translated into English Verse, by John O'Hagan, M. A., one of the Justices of the Supreme Court in Ireland.

First American from the Second London Edition. Boston : Willard Small. 1886. Price 75 cents.

Mr. Small has issued in excellent form, on good paper, and with clear type, the best English translation ever made of this book. Much value is added to the book by the excellent form, on good paper, and with clear type, the best English translation ever made of the book. Much value is added to the book by the excellent introduction to the work.

A Catalogue of Minerals, alphabetically arranged, with their Chemical Composition and Synonyms. By Albert H. Chester, Professor of Mineralogy in Hamilton College. New York : John Wiley & Sons, 15 Astor Place. 1886.

This book has been prepared by Prof. Chester for a special object. It is issued without pretence. Having one definite object in view, the author has wisely abstained from attempting to make this book cover anything more than its exact field. We can not commend too highly this idea of making the book for one definite, specific purpose, and mercilessly excluding from it all that does not tend to that purpose. It contains a complete alphabetical list of minerals including all names up to date. No symbols are used. Useless names are omitted, and full-faced type is used for species that the author deems important. There is a good margin for new names and for notes, and the book will be found convenient as a check list, and for purposes of cataloguing.

Geograpy. A Text Buk in Fonic Orthograpy. By G. W. Larison, M. D., Principal ov the Academy ov Sienc and art at Ringos, N. J., formerly Prof. ov Natural Sienc in the University at Lewisburg, Pa., other ov The Elements ov Orthoepr, The Tenting Scul, Sylvia Dubois, &c., &c. Ringos, N. J., Published by The Fonic Publishin Hous. 1885.

We fully respect the opinions of the author, as set forth in the preface of this book, although we do not as fully believe in their practical success.

Phonetic spelling we believe to be vastly more difficult than conventional spelling, more difficult in fact than any of its advocates have ever realized or would be willing to admit. We have never seen the phonetic system illustrated without numerous mistakes, that is, if we admit the standard authorities on pronunciation to be correct. We have no thought of questioning the sincerity of Dr. Larison or any of the advocates of phonetic orthography, and we wish them all the best of success in realizing what they promise. Our expectations, however, do not go with our wishes in this respect.

An Introduction to the Study of Robert Browning's Poetry. By Hiram Corson, LL. D., Professor of Rhetoric and English Literature in the Cornell University. Boston : D. C. Heath & Co., Publishers. 1886.

This book contains thirty-three of Browning's shorter poems, to the understanding of which the reader is helped by a short outline of the argument of each. At the end of the volume is a partial biography of Browning. The poems selected are types of the author's work, and bring to view its distinctive features. They are perhaps as little difficult as any of like merit that could have been selected.

The eminent value of this book, however, lies in the two essays on "The Spiritual Ebb and Flow exhibited in English Poetry from Chaucer to Tennyson and Browning," and "The Idea of Personality and of Art as an Intermediate agency of Personality, as embodied in Browning's Poetry." These essays are worthy to be printed in letters of gold. They have no trace of the taint of materialism. They show Professor Corson at his best, and than his best there is little better.

Two shorter essays are devoted to Mr. Browning's obscurity and to his verse.

Elements of Determinants. Paul H. Hanus, Denver, Col. Boston : Ginn & Co.

The publication of a treatise on Determinants by an American author is a noteworthy sign in our scholarship. Evincing alike the advanced position of our younger generation of mathematicians, and a demand for advanced instruction for our American students.

The work of Professor Hanus answers excellently its purpose. The development of determinant forms from simultaneous linear equations, simply and clearly carried forward, places the student at the start on firm ground.

The definition of a "Determinant" does not seem as satisfactory as it might be made by an expressed reference to the previous development—defining it as a sum of products "of n^2 elements," instead of as a "function of n^2 elements." Throughout the discussion, however, the statements of conclusions and theorems are clear and definite. There is, now and then, as is unavoidable in a first edition, a misplaced subscript, sign or letter. The typographical elegance and accuracy are, however, considering the difficulties, quite remarkable.

In the chapter on "application and special forms," the selections are admirable and the distinguishing statements are precisely and clearly put.

The work has been tested by the writer in the class-room, and may be confidently commended as a capital introduction to the study of Determinants.

The Study of Latin in the Preparatory Course. By E. P. Morris, Professor of the Latin Language and Literature in Williams College. Boston: D. C. Heath & Co. 1886.

In this little "monograph" of 27 pages, Prof. Morris makes an interesting contribution towards the clearing up of the classical question. The gist of his argument is contained in the following words: * * * "We no longer study Latin in our lower schools in order to learn Latin; we study it and teach it, with primary reference to the science of philology." The fact that Latin teaching no longer issues in a lively interest in Latin literature, Prof. Morris neither denies nor deplores. Through the study of Latin the student enters into modern science in general, by the way of the special science of Philology. School training has ceased to be literary and humanistic, and has become modern and scientific, with evolution as its central idea. Doubtless Prof. Morris escapes the curse of Philistinism, because he clings, even in this unclassical way, to the classic languages. But his views are more destructive of classical interests proper than the rank denunciation of the classics that the Germans are wont to stigmatize with that effective epithet. That the old humanistic loyalty can be transferred to modern philology is not to be thought of for a moment. That the attempt to bring this transfer to pass is failing, becomes, by all the signs of the times, daily more clear.

A Preparatory Course in Latin Prose Authors. By Albert Harkness, Ph. D., LL. D. New York: D. Appleton & Co. 1886.

The works of Prof. Harkness have been so long time in the schools, and their merits so widely recognized, that a new edition needs little introduction. The present work contains in a not unwieldy volume, the first four books of the Gallic War, Sallust's Catiline, and eight Orations of Cicero, with commentary, map and special vocabulary. In this form the work appeared first in 1878. The only feature in the present edition, therefore, to which attention need be called, is a brief treatise of forty-five pages, describing with sufficient fulness to meet the wants of beginners, the organization and equipment of the Roman army and the various military operations.

Teachers familiar with the embarrassment of the learner engaged in his first struggle with the Latin idiom, will welcome a help so well calculated to excite intelligent interest in the pupil. If the beginner can be led in any degree to understand the relative importance of Cæsar's Gallic campaigns, much has been done to enliven what is, at best, for the young student, rather dreary reading; but such an understanding is hardly possible without some knowledge of the military system of the Romans. The treatise is fully illustrated by numerous cuts and six full page colored plates.

Cæsar's Commentaries on the Gallic War; with Notes, Dictionary and a Map of Gaul. By Albert Harkness, LL. D., Professor in Brown University. Revised edition illustrated. New York: D. Appleton & Co. 1886.

The comment just made on the Preparatory Course applies in all respects to this work. The essay on the military system of the Romans is the same in each. The maps and illustrations are excellent, and the book a decided improvement on the former edition.

The Elements of Pedagogy. By Emerson E. White, A. M., LL. D. Cincinnati: Van Antwerp, Bragg & Co.

This book embodies a healthful reaction against the undigested utterances of some professional reformers. The highest praise we can bestow on the book is to say that it is common sense skillfully and clearly applied to educational processes. As typical statements we quote the following:

"A primary knowledge of psychical processes can be gained only through consciousness. The researches of physiologists have not yet thrown a ray of light on the nature of mind, or on the manner in which sensorial action occasions mental activity, or on the manner in which mental action produces sensorial changes. The interaction of soul and body in psychical phenomena seems as insolvable as that other mystery called *life*." (p. 13).

"Knowledge presented to the mind by language and thus known is called *acquired* knowledge, to distinguish it from original knowledge. When knowledge that is original to one mind is communicated to another mind, it becomes to another mind acquired knowledge. * * * * *

It follows that it is an important end of school education to train the pupil to apprehend thought expressed in language—to read intelligently the printed page. Books contain the recorded knowledge of the race, and it is only by reading books that man can come into possession of this rich inheritance." (p. 118).

In no part of the book has Mr. White attempted to parade a novel theory. He states the laws of the mental life as they are revealed in consciousness, and then employs these laws to illustrate the normal processes of the school-room. On every page there is evidence of conscientious and thorough thinking, and of a profound line of truth. The discussions cover almost every topic of interest to the thoughtful teacher, and the book as a whole is the safest and surest guide to rational teaching with which we are acquainted.

How to Teach Reading, and What to Read in School. By G. Stanley Hall, Ph. D., Professor of Psychology and Pedagogy in Johns Hopkins University. pp. 40. Boston: D. C. Heath & Co. 1886.

The form in which this monograph is published and the style in which it is written, both so modest and unemphatic, will allow many to pass it by without the careful reading and re-reading which its solid merits deserve and will richly repay. It is no ordinary book; indeed, so far as we are aware, nothing to compare with it has hitherto appeared on this subject in English. It contains forty pages only; but the broad ground indicated by its title (which by the way suggests an inferior sort of book) is well covered as to all essential points of the history, philosophy, and methodology of the subject; and beyond this, such is the marvelous condensation practised (and pushed rather too far for the highest usefulness of the book, we think), the author has enriched his discussion with references, suggestions, and various side-glances, so numerous and important as to render the essay a piece of very slow and very instructive reading. For instance, one finds appreciative and discriminating allusions to many of his pedagogic friends and masters, at the rate of one or two a page, from Plato down through a long German list to Matthew Arnold, as well as mention of a few names that we imagine will not be widely recognized in this country. But there is no trace of effort to display the author's learning, and as little attempt to press unduly the few decided opinions he expresses.

Somewhat less than half the book (15 pages) is taken up in setting forth, historically and critically, the principal methods of teaching reading, particularly the early stages of it, and beginning with page 10 is a sketch or summing up of the modes of procedure upon which successive generations of teachers appear to be most in accord. But the process or art is never spoken of as being a simple or easy one, or as being settled once for all. Those teachers or "educators" who are always on the lookout for final, just-how methods to "adopt," will find small comfort in reading that "it is the inveterate vice of the pedagogue's mind to forget that all methods are only means, and never ends, for the pupils; that the highest art is to conceal art; that method in teaching, as in philosophizing, is only an arch overhead in tunnelling a hill, which serves to keep off the falling sand, that the work may go on effectively beneath; that it is not unlike the bony skeleton, giving form and effectiveness to the body, but ghastly if exposed." (p. 14.)

Dr. Hall is one of the most catholic of educationalists; this essay teems with expressions of wide and genial sympathy that will give encouragement to many a faithful and intelligent teacher who has never learned to pronounce the pedagogic

shibboleth of any "school". "Above all, it should be borne in mind that the stated use of any method does not preclude the incidental use of any, and perhaps of *all* others. To write the letters may help one child; to name them another; casual allusion to, or illustration by, the interjectional method of Oehiwein, or to the gingerbread method of Basedow, a third. In fine, nothing of this sort which a tactful teacher knows well can fail to help her and her pupils." (p. 16)

The second part of the monograph deals with the problem of what to read in school—"a far larger and more important question than how to read, and respecting which there is now much less agreement." (p. 16.)

Here is where our schools of every grade are lamentably superficial and weak, as Mr. Charles Francis Adams forcibly pointed out, years ago, to the teachers of Quincy, and here Dr. Hall makes many strong and pregnant suggestions. He argues that ability to read is by no means sure to prove a blessing to its possessor, and says that "the school has no right to teach how to read, without doing much more than it now does to direct the taste and confirm the habit of reading what is good rather than what is bad." (p. 18.) He indicates the most fruitful lines of reading for the chief phases or stages of the child's development, from the Mother Goose age up through the period of myth and fables to the Greek and Roman classics (adaptations), and to Dante and Shakespeare, touching with a wise and practised hand upon such topics as mythology and folk-lore, science, history, grammar drill, composition-writing, Bible-reading, ethics, etc., etc.

The temptation to quote is very strong, and our copy of the book is pencilled for precious bits on the margin of almost every page, but we must forbear for lack of space. Two or three passages shall suffice.

"We must avoid selections the full meaning of which can be immediately apprehended and conveyed." (p. 26.)

"Till children take pleasure in the silent, passive, cursory reading of good literature, touching but not pressing the keys, learning the great task of catching the meanings of others' minds undistorted, the responsibility of the school does not entirely cease." (p. 29.)

"Widely read young people are almost always feebly educated." (p. 32.)

"The repertory of methods must be as varied as the individuality of the pupils, and there must be far less reverence for one infallible, invariable method always followed with all." (p. 37.)

The recommendation, on page 36, "that books may be cut and resuméd, and recast in new forms by a good teacher and story-teller with great gain," we should hesitate to indorse. While admitting the possibility of the thing, in thoroughly competent hands, we believe that anything like the common practice of it should be discouraged as tending to dilute and cheapen, if not corrupt, classic stories. We confess to a feeling that there is something almost sacred in the text of such masterpieces as Robinson Crusoe and Gulliver, and while we might trust so reverent a hand as Professor Hall's at the delicate surgery of cutting and pruning them, we could not give to many teachers of our acquaintance *carte blanche* to raze and tinker at pleasure, even for temporary purposes, the time-tried tales of the masters of story-telling.

Our pleasure in reading this book has been somewhat marred by the inartistic construction of not a few of the sentences. It is easy to see that Dr. Hall is almost wholly pre-occupied with his matter, a fact that goes far to excuse inattention to form or style; but we submit that the following—and there are several sentences almost as bad—is *unnecessarily* hard to read:

"Some German writers asserted that most children did not need to learn to read, not for the reasons Rousseau said Émile need not read till fifteen, although he would if or because not forced to it at ten, but because between the greatly magnified hardship of old and the fantastic nature of new methods, ignorance seemed preferable" (p. 4.)

There is also in the book much careless proof-reading. Some of the mistakes are so evident as not to be misleading, but they are none the less discreditable. The jumble of German in the foot-note at the bottom of page 3 is unequalled, we believe, by anything we have ever seen in print before. Such mistakes are specially lamentable, because they seem to indicate hurry or carelessness, and prejudice at the outset, although nowhere in the *thought* of this book is there a trace of haste, but everywhere the signs of even poise and complete mastery.

Such blemishes, however, are slight when set against the remarkable combination of learning and insight which appears on every page, and renders the book one of the most noteworthy that we have ever met with.

THE ACADEMY:

A Journal of Secondary Education

ISSUED MONTHLY

UNDER THE AUSPICES OF THE

ASSOCIATED ACADEMIC PRINCIPALS

OF THE STATE OF NEW YORK

TERMS: ONE DOLLAR A YEAR (IN ADVANCE)

CONTENTS:

<i>The Mutual Relations of the Colleges and Academies,</i>	-	361
<i>Notes on German Schools, III.</i>	- - - - -	373
<i>The Teaching of Latin,</i>	- - - - -	381
<i>Massachusetts State Teachers' Association,</i>	- - - - -	389
<i>A Layman's View of Public Education,</i>	- - - - -	391
<i>Notes,</i>	- - - - -	394
<i>Books Received,</i>	- - - - -	397

JANUARY, 1887.

GEORGE A. BACON, Publisher,
SYRACUSE, N. Y.

Entered as second-class matter at the postoffice, Syracuse, N. Y.

MODERN CLASSICS.

A School Library for \$11.22.

THIRTY-THREE volumes, neatly bound in cloth, averaging 310 pages.

"An unrivalled list of excellent works."—THE INDEPENDENT, New York.

"The prettiest and best little library ever published in this country."

—Dr. W. T. HARRIS, formerly Sup't of Schools at St. Louis, Mo.

A sample copy will be sent to any address by the publishers on receipt of 40 cents; the money will be refunded if the book is returned within one month.

A pamphlet containing the Table of Contents of each volume will be sent free to any one applying for it.

Longfellow's "The Courtship of Miles Standish,"

Arranged for School Exhibitions and Private Theatricals, will enable any school to raise money enough to pay for the School Library described above. Price, 15 cts.

THE RIVERSIDE LITERATURE SERIES.

TWENTY-SEVEN 15-CENT READING BOOKS,

Containing unabridged masterpieces of the best American authors. History, Biography, Mythology, Poetry. 22 numbers now ready. Each number, 15 cents.

HOUGHTON, MIFFLIN & COMPANY,

4 PARK STREET, BOSTON, MASS.

What Pencils Do You Use?

This is a question well worth your consideration, if you value time, patience, and satisfaction. Do you wish a pencil with a strong, tough and smooth lead, with straight-grained wood that can be easily cut, and with lead that will not break in sharpening, and will not need to be touched to the tongue to make it mark? If so see that the pencil you get is marked

"DIXON'S AMERICAN GRAPHITE SM" etc.

The "SM" is the favorite for general use, being equal to a No. 2 in softness of lead; both harder and softer grades are made, so that the right pencil for the right work can always be had. If your stationer does not keep DIXON'S, mention THE ACADEMY, and send 16 Cents for samples worth double the money.

JOS. DIXON CRUCIBLE CO., JERSEY CITY, N. J.

THE ACADEMY

Is offered with the following periodicals at reduced rates, if paid in advance:

Harper's Monthly.....	\$4.25	regular price, \$4.00
Atlantic Monthly.....	4.25	" " 4.00
Century.....	4.50	" " 4.00
Scientific American.....	3.70	" " 3.20
N. E. Journal of Education.....	3.00	" " 2.50
Popular Science Monthly.....	5.00	" " 5.00
North American Review.....	5.00	" " 5.00
Political Science Quarterly.....	3.00	" " 3.00
The Forum.....	5.00	" " 5.00
The Citizen.....	2.00	" " 1.50
Education.....	3.25	" " 3.00
Educational Gazette.....	1.50	" " 1.00

GINN * & * COMPANY

Wish at this season of the year to call the attention of teachers in High Schools and Academies to the following books necessary to supplement the regular text-books in use.

LATIN. Tomlinson's Manual for the study of Latin Grammar, 20 cents, and Latin for Sight Reading, \$1.00. Halsey's Etymology of Latin and Greek, \$1.12. Shumway's Latin Synonyms, 30 cents. Parkhurst's Latin Verbs, 35 cents. Prebles & Parker's Handbook of Latin Writing, 50 cents. Ferguson's Questions on Caesar and Xenophon, \$1.12. King's Latin Pronunciation, 25 cents. Whiton's Auxilia Vergiliana, 15 cents.

GREEK. Harding's Greek Inflection, 50 cents. Keep's Essential Uses of the Moods, 25 cents. Seymour's Language and Verse of Homer, 45 cents. Schmidt's Rhythmic and Metric of the Classical Languages, \$2.50. Stein's Dialect of Herodotus, 10 cents. Ginn & Co.'s Classical Atlas, \$2.00.

MATHEMATICS. Wentworth's Examination Manual in Arithmetic, 35 cents. Exercises in Algebra, 70 cents. In Geometry, 70 cents. Examination Manual in Algebra, 35 cents.

HISTORY. Allen's Reader's Guide to the Study of English History, 25 cents. Halsey's Genealogical and Chronological Chart, 25 cents.

ENGLISH. Hudson's Essays on Education, 25 cents. Browne's Shakespeare's Versification, 25 cents. Gummere's Handbook of Poetics, \$1.00. Minto's Manuals of English Prose and Poetry \$2.00 each. Thom's Two Shakespeare Examinations, 45 cents. Hudson's Harvard Shakespeare, 20 volumes, \$25.00. Life, Art and Characters of Shakespeare, 2 volumes, \$4.00. Classics for Children, series of Elementary Reading Books, 25 to 50 cents each.

MISCELLANEOUS. Yale Examination Papers, 75 cents. Smith and Blackwell Parallel Syntax Chart, \$1.00. Harvard Examination Papers, \$1.00. Packard Studies in Greek Thought, 80 cents. Ancient Cosmology, 20 cents. Delbruck's Introduction to the Study of Language, 94 cents. Hofmann's Inaugural Address (important in regard to the study of the classics), 25 cents. Art in Education, 25 cents. Lectures on School Hygiene, 80 cents. Clark's Philosophy of Wealth, \$1.00.

In ordering books, teachers will please mention this paper.

GINN & COMPANY, PUBLISHERS,

743 Broadway, New York.

THE ACADEMY.

A JOURNAL OF SECONDARY EDUCATION.

THE ACADEMY is endeavoring to fill a place hitherto unoccupied in educational journalism. It appeals to teachers above the grammar grade, and though specially directed to the work of those in charge of schools, it will be found to be of high value and interest to all engaged in department work.

IT HAS ALREADY ACHIEVED SUCCESS,

Having subscribers in every State of the Union. It aims to be **practical**, rather than literary, and to present the views of none but successful teachers actually engaged in the work. It is entirely co-operative, no one of the teachers connected with it receiving either salary or pecuniary compensation for his time or labor.

ITS SOLE OBJECT IS TO ASSIST TEACHERS,

And bring them closer to one another and to their work.

It looks directly to teachers for its support, depends upon them for its efficiency, and asks the help of their subscriptions, their influence, and a free interchange of ideas.

WYCKOFF'S Phonographic Institute,

SPRAGUE BLOCK, ITHACA, N. Y.

Verbatim Reporting thoroughly taught, and students qualified to fill profitable positions. Correspondence solicited.

REMINGTON STANDARD TYPEWRITER.

WE GUARANTEE ITS SUPERIORITY.

Buy it, with the **privilege of returning** it unbroken at any time within 30 days, C. O. D., for full list-price, if not **ABSOLUTELY SATISFACTORY** in every respect.

WILLIAM A. KING,

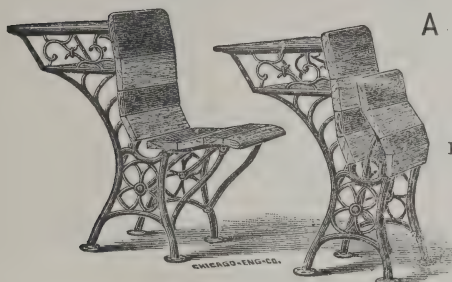
SOLE DEALER FOR ONONDAGA COUNTY. TYPEWRITER SUPPLIES AND MACHINES TO RENT.
SYRACUSE, N. Y.

Union School Furniture Co.,

BATTLE CREEK, MICH.

—SOLE MANUFACTURER OF THE—

"Automatic" or Rear Folding School Seat.



A New Principle. Universally
Approved.

THE HINGE DISCARDED.

Economizes Space, and secures an Upright
and Healthful Position for the Pupil.

HIGHEST AWARD

At the New Orleans Exposition!

A Sweeping Victory over all Competitors.

It is strongly endorsed by School Boards, Parents, Teachers and Pupils, because it contains features **not found in any other School Seat**, which are **Essential** to the Convenience, Comfort and Health of the Pupils. It is already in use in a multitude of the leading schools in all directions. Illustrated Catalogue mailed to any address.

Every Variety of School, Bank and Opera Furniture.

—We are also the Exclusive Manufacturers of the Celebrated—

STANDARD CRAYONS.

To supply the urgent demand for a Good Crayon, a number of **SO-CALLED DUSTLESS CRAYONS** have been put upon the market, **NOT ONE OF WHICH IS A SUCCESS.** They are hard and gritty, and scratch the blackboards, or contain substances which "gum" the boards. After several years experimenting by a practical inventor, a crayon has been produced which is very **SMOOTH** and **COMPACT**; contains **NO GRIT**; **CANNOT "GUM" THE BOARD**; makes a **BEAUTIFUL MARK**; **ERASES READILY**; which is very **PLEASANT TO THE HAND**, and may be carried like a slate pencil in the pocket if desired; and which makes **COMPARATIVELY LITTLE DUST.** The little dust produced by this crayon being heavy, falls directly to the chalk trough and lies there, and **DOES NOT FLOAT THROUGH THE ROOM.**

The medium "Standard" crayon will **LAST ABOUT AS LONG AS FOUR OF THE COMMON KIND**, so that while the price **PER BOX** is greater, the crayon is really cheaper.

This Crayon only needs to be seen to be appreciated. We shall be glad to send to any one a **SAMPLE FREE** on application.

Price per Box, - - 40 Cts.

☞ Order by box and not by gross, as they are put up in boxes of 100 each.

Liberal Discounts in Quantity.

—0—

IN REAL SLATE FOR BLACKBOARDS

we control the entire product of the Old Bangor Quarries, which produce the finest slate for the purpose in the world. Write for Descriptive Circulars.

W. A. CHOATE & CO.,

Managers General Eastern Office,

508 Broadway, - - - ALBANY, N. Y.

FOR SECONDARY SCHOOLS.

HISTORY.	Fisher's Outlines of Universal History.	
	Designed as a text-book and for private reading. 1 vol., 8vo, 690 pages, 32 maps.	For introduction, \$2.40.
	"The best work of its kind extant in English."— <i>New York Tribune</i> .	
	Swinton's Outlines of the World's History.	For introduction, \$1.44.
	12mo, Illustrated, map, 500 pages.	
PHYSICS AND CHEMISTRY.	Cooley's New Text-Book of Physics.	
	By LEROY C. COOLEY, Ph.D. Revised. 12mo, 246 pages, Illustrated.	For introduction, \$0.90.
	Wells's Natural Philosophy.	For introduction, \$1.15.
	1 vol., 325 pages, Illustrated.	
	Cooley's New Text-Book of Chemistry.	For introduction, \$0.90.
	12mo, 303 pages, Illustrated.	
	Eliot and Storer's Elementary Chemistry.	For introduction, \$1.08.
	12mo, 359 pages, Illustrated.	
BOTANY.	Gray's How Plants Grow.	
	For young people and the schools. Small 4to, 500 Illustrations.	For introduction, \$0.80.
	Gray's School and Field Book of Botany.	
	The most widely used botanical text-book in Secondary Schools. 8vo, 621 pages, Illustrated.	For introduction, \$1.80.
	Gray's Manual of Botany.	
	Eighth issue. Containing besides illustrations, 20 plates of sedges, grasses, ferns, etc. 8vo, 700 pages.	For introduction, \$1.62.
	Gray's Structural Botany.	
	Being Vol. I. of Gray's New Botanical Text-Book. For introduction, \$2.00.	
	Goodale's Physiological Botany.	
	Being Vol. II. of Gray's New Botanical Text-Book. For introduction, \$2.00. (Vols III. and IV. in preparation.)	
	Coulter's Manual of the Botany of the Rocky Mountains.	
	For the use of Schools and Colleges between the Mississippi River and the Rocky Mountains. By Prof. JOHN M. COULTER, Ph.D., Wabash College. 8vo, cloth, 496 pages.	For introduction, \$1.62.
	Gray and Coulter's Text-Book of Western Botany.	
	Consisting of Coulter's Manual of the Rocky Mountains, to which is prefixed Gray's Lessons in Botany.	For introduction, \$2.16.
ZOOLOGY.	Tenney's Natural History of Animals.	
	By SANBORN TENNEY and ABBY A. TENNEY. Illustrated with five hundred wood-engravings, chiefly of North American animals. Cloth, 12mo, 293 pages.	For introduction, \$1.20.
	Tenney's Elements of Zoology (New).	
	Illustrated by over 750 wood-engraving. 1 vol., cloth, 503 pages.	For introduction, \$1.60.
	Tenney's Manual of Zoology.	
	Illustrated with over 500 engravings. Revised. For introduction, \$2.00	
GEOLOGY.	Dana's Geological Story Briefly Told.	
	By Professor JAMES D. DANA, LL.D. 1 vol., 12mo, 275 pages. Numerously illustrated and handsomely bound.	For introduction, \$1.15.
	Dana's New Text-Book of Geology.	
	Revised and enlarged. Illustrated by 450 engravings. 412 pages.	For introduction, \$2.00.
	Dana's Manual of Geology.	
	Thoroughly revised, much enlarged, and almost wholly rewritten. Illustrated by over eleven hundred and fifty figures in the text, twelve plates, and a physiographic chart of the world in colors. 1 vol., 8vo, cloth, 940 pages.	For introduction, \$3.84.
PHYSICAL GEOGRAPHY.	Guyot's Physical Geography.	
	By ARNOLD GUYOT, late Blair Professor of Physical Geography and Geology, College of New Jersey. Large 4to, fully illustrated, charts, colored maps, etc. Full cloth, 124 pages. Revised, with new plates and newly engraved maps.	For introduction, \$1.60.

 Samples of any of the above sent for examination on receipt of price named.

 Our BRIEF DESCRIPTIVE CATALOGUE sent Free on request.

IVISON, BLAKEMAN, TAYLOR & COMPANY, Publishers,

753 AND 755 BROADWAY, NEW YORK.

Cornell University.

The number of Courses of Instruction given the present year at Cornell University exceeds four hundred.

The Non-Technical Courses lead to degrees in Arts, in Philosophy, in Science, and in Letters. In all these Courses the work is prescribed during the Freshman year, and for the most part during the Sophomore year ; in the Junior year with the exception of two hours in English Composition, and in the Senior year, without exception, the work is elective.

The Technical Courses lead to degrees in Agriculture, Architecture, Chemistry, Civil Engineering, Electrical Engineering, and Mechanical Engineering.

The University makes exclusive use of ten Buildings, twelve Laboratories, and ten Museums. Its Library now consists of more than 60,000 volumes, and the list of Scientific and Literary journals taken numbers more than four hundred.

For advanced work with Seniors and Graduates, the Seminary methods are adopted.

The Corps of Instruction consists of Seventy-eight Professors, Lecturers, and Instructors.

Thirty-six University Scholarships at \$200 each, and Eight Fellowships of \$400 each are given.

Tuition to those holding State Scholarships, as well as to students in Agriculture, and to all Graduate students, is free ; to all others it is \$75 a year.

Examinations for Admission are held June 15th and September 15th, 1887.

For the University Register and for special information, address either the President of the University, or

E. L. WILLIAMS, Treasurer,

ITHACA, N. Y.

ACADEMIC ALGEBRA,

— PREPARED BY —

WEBSTER WELLS, S. B.,

PROFESSOR OF MATHEMATICS IN MASSACHUSETTS INSTITUTE OF TECHNOLOGY.

There has seemed to be an urgent demand for a preparatory book that should be elementary in its character, and yet sufficiently *complete* for any

HIGH SCHOOL OR ACADEMY,

AND THAT IT SHOULD BE ARRANGED BY A

PRACTICAL TEACHER OF THE SUBJECT.

It will be found especially strong in those essential features of Algebra which must enter into all the student's future work, and in which so many other texts have been deficient.

WELLS' UNIVERSITY ALGEBRA,

Is used at HARVARD, CORNELL, PRINCETON, LAFAYETTE, and about 100 other Colleges in the United States.

LEACH, SHEWELL & SANBORN, Publishers,

87 Franklin Street, Boston.

743 Broadway, New York.

The history of the world can be found in the history of a dozen names.

—ARCHDEACON FARRAR.

Ready June 1st.

GREAT LIVES: A COURSE OF HISTORY IN BIOGRAPHIES

By REV. J. I. MOMBERT, D. D.

FULL PAGE MAPS.

This work will be found to be of absorbing interest for the School, the Family, the Library, and the General Reader.

Without going minutely into the affairs of any particular country, the author selects some great life in a given epoch, and around it groups the important historical events—the habits, customs and manners of the people; their social, political, religious and intellectual life; and by vivid and interesting *pen pictures*, fixes history, **ANCIENT, MEDIÆVAL AND MODERN** in the mind of the reader.

It substitutes photographic sketches of great men and their deeds for the confused kaleidoscope which embraces too much, and impresses too little.

The charming style in which this book is written will serve to awaken interest, fix attention and make the history lesson the favorite of all the studies. As a **Supplementary Reader** it will be found of unequalled interest; its vivacious and pleasing narrative attracts the mind, and assures the best results.

TEACHERS' READING CIRCLES will here find a work that will yield them a rich harvest, whether considered as a general history, or read for its style of general culture.

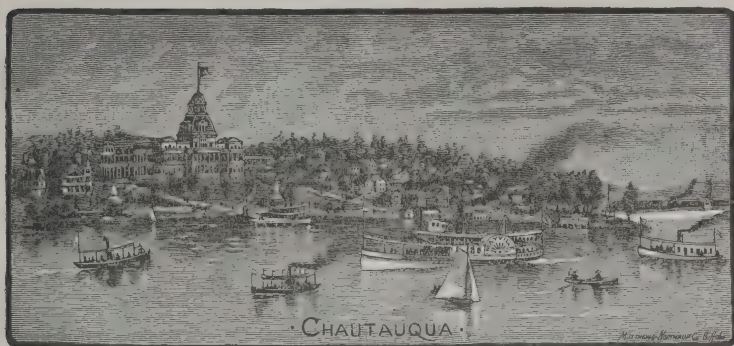
Samples sent, postpaid, on receipt of the Introduction and Wholesale price, \$1.00.

Leach, Shewell & Sanborn, 87 Franklin St. Boston, and 743 Broadway, New York.

JAMES A. EDWARDS, General Western Agent, DUBUQUE, IOWA.

CHAUTAUQUA FOR 1887.

The Famous Summer University of America.



TEACHERS' RETREAT. A three weeks' meeting of secular school teachers every July, for lectures, illustrative lectures, biographical studies, scientific experiments, etc., combining with the recreative delights of the summer vacation the stimulating and quickening influence of the summer school, careful study of principles and methods.

SCHOOLS OF LANGUAGE. A summer school of six weeks, designed to illustrate the best methods of teaching languages, and to furnish instruction to students. The following departments are under the charge of capable and enthusiastic teachers: *German, French, Latin, Greek, Anglo-Saxon, Sanskrit, Hebrew, English Literature.* Special classes of all kinds.

**IDEAL FOREIGN TOUR—A UNIQUE PLAN—BRILLIANT LECTURERS,
GRAND CONCERTS, ILLUMINATIONS AND FIREWORKS.**

ACCOMMODATIONS EXCELLENT. The Hotel Athenæum is beautifully located in the centre of a lovely park. **RATES REASONABLE.**

The Chautauqua Teachers' Reading Union,

A home circle for professional reading and study during the entire year.

JOHN H. VINCENT, D. D., Chancellor.
THOMAS W. BICKNELL, LL. D., President

W. A. DUNCAN, Secretary,

SYRACUSE, N. Y.

MODERN LANGUAGE NOTES

MONTHLY PUBLICATION,

(For eight months in the year,)

DEVOTED TO THE INTERESTS OF THE



ACADEMIC STUDY OF ENGLISH, GERMAN, AND
THE ROMANCE LANGUAGES.

A. MARSHALL ELLIOTT, *Managing Editor.*

JAMES W. BRIGHT, JULIUS GOEBEL, HENRY ALFRED TODD, *Associate Editors.*

This is a new and successfully-launched periodical, managed by a corps of professors and instructors in the Johns Hopkins University, with the coöperation of many of the leading college professors, in the department of modern languages, throughout the country. While undertaking to maintain a high critical and scientific standard, the new journal will endeavor to engage the interest and meet the wants of the entire class of serious and progressive modern language teachers, of whatever grade.

Subscription Price, One Dollar per Annum. Single Copies, Fifteen Cents.

 SPECIMEN PAGES SENT UPON APPLICATION. 

Subscriptions, advertisements, and all business communications should be addressed to the

MANAGING EDITOR OF MODERN LANGUAGE NOTES.

JOHNS HOPKINS UNIVERSITY, BALTIMORE, MD.

CONTENTS NO. 4 (APRIL.)

- Sievers, E.—The Etymology of *endemest*(?).
Bright, Jas. W.—Suum Cuique.
Thomas, Calvin.—The Academic Study of Goethe's Faust.
Hart, J. M.—Rhetoric—Style—Metre.
Garner, Samuel.—A Much Needed Reform.

REVIEWS:

- Butler, A. J.—The Paradiso of Dante Alighieri (*E. L. Walter.*)
Harrison—Baskervill.—A Handy Anglo-Saxon Dictionary: Based on Groschopp's Grein (*James W. Bright.*)
Cledat, L.—Grammaire Élémentaire de la Vieille Langue Française (*Alcée Fortier.*)
Schmeding, Dr. F.—Die klassische Bildung in der Gegenwart (*H. S. White.*)
Swinburne, Chas. Algernon.—Victor Hugo (*H. C. O. Huss.*)

CONTENTS NO. 5 (MAY.)

- Lang, Henry R.—Contributions to Spanish Grammar.
Egge, Albert E.—Notes on *Specimens of Early English.*
Carpenter, Wm. H.—With Notes.
Cook, Albert S.—The Anglicization of Macaulay's Vocabulary.
Stuerzinger, J.—The Oaths of Strasburg.

REVIEWS:

- Conybeare, Mueller.—A History of German Literature by W. Scherer (*Julius Goebel.*)

- Siede, Julius.—Syntaktische Eigentümlichkeiten der Umgangssprache weniger gebildeter Pariser (*Samuel Garner.*)
Tallichet, H.—On the Formation of the Plural in *s* in English (*Sylvester Primer.*)
Van Der Smissen, W. H.—Kinder und Hausmärchen der Gerbrüder Grimm (*George Hempl.*)
Vising, Johan.—Sur la Versification Anglo-Normande (*Casimir Zdanowicz.*)

CONTENTS NO. 6 (JUNE.)

- Gummere, Francis B.—Metaphor and Poetry.
Thomas, Calvin.—The Academic Study of Faust Again.
Karsten, Gustav.—Zu den Strassburger Eiden.
Hart J. M.—Anglo-Saxonica.
Carpenter, Wm. H.—Two Words of Dutch Origin.
Schilling, Hugo.—Notes on the Finnsaga.
Huss, H. C. O.—A National Movement in Germany.
Anderson, Melville B.—Is Macaulay's Vocabulary more Latinized than De Quincey's?
Browne, Wm. Hand.—Grammar Wanted.

REVIEWS:

- Boehmer's Romanische Studien, Heft XX. and XXI. (*J. Stürzinger.*)
Histories of German Literature (*H. S. White.*)
Cledat, L.—La Chanson de Roland (*Adolphe Cohn.*)
Ybarra, Alejandro.—A Practical Method of Learning Spanish (*Henry R. Lang.*)

"On the Observational and Inductive Method."

—The Christian Union.

BARNES' NEW GEOGRAPHIES,

BY THE EMINENT GEOGRAPHER,

JAMES MONTEITH.

IN ORDERING, ASK FOR

BARNES' ELEMENTARY GEOGRAPHY, . . . Price for Exam., \$0.60

BARNES' COMPLETE GEOGRAPHY, Price for Exam., 1.25

MONTEITH'S NEW PHYSICAL GEOGRAPHY, . Price for Exam., 1.00

THE SET for Examination, \$2.50.

Recognized and Rewarded!

Attractive and Substantial!

"We predict their general use in our schools."—*Scientific Arena*.

"We are pleased with and commend them."—*Pennsylvania School Journal*.

"Taken together, these books are masterpieces of science and art."—*N. Y. School Journal*.

"An ideal text-book. The illustrations are artistic, the maps perfect, and the text clear and comprehensive."—*The Interior*.

"The numerous improvements introduced in this Geography combine to render it one of the best yet produced."—*Popular Science News*.

"Not surpassed in respect to type, paper, presswork, and illustrations, even by the best books on art. * * The plan of the books is excellent, and one can hardly repress a feeling of satisfaction and even pride in the enterprise of the house."—*THE ACADEMY*.

"In respect to methodical arrangement, clearness and perspicuity in statement, thoughtful choice of topics to present, and elegant mechanical construction, little improvement can apparently be made upon Barnes' New Geographies."—*Wm. A. Mowry in Education*.

"In this series we find a recognition not only of the best *pedagogical principles* of teaching, but an application of the correct laws of culture in *method*, that give these books their true position in the front rank of practical school-books."—*New England Journal of Education*.

AN ENGLISHMAN'S TRIBUTE,

"Characterized by beautiful illustrations, maps of unusual excellence, and graphic text instruction."—*The Publishers' Circular*, London, Eng.

THE BOOM BEGUN!

BARNES' GEOGRAPHICAL SERIES

—IS ALREADY ADOPTED IN—

New York City, Jersey City, N. J., Louisville. Ky., Brooklyn, L. I.,
Paterson, N. J., Binghamton, N. Y., Saratoga, N. Y.,
Philadelphia, Nyack, N. Y.,

And many another good place! For Specimen Pages, Descriptive Circulars, or Sample Copies,
&c., &c., address

A. S. BARNES & CO., PUBLISHERS,

111 AND 113 WILLIAM ST., NEW YORK.

APPLETON'S NEW * ARITHMETICS.

TWO VOLUMES.

MAGNIFICENTLY ILLUSTRATED----PHILOSOPHICALLY TREATED.

THE SERIES :

I. NUMBERS ILLUSTRATED

And applied in Language, Drawing and Reading Lessons. An Arithmetic for Primary Schools.

By ANDREW J. RICKOFF and E. C. DAVIS.

Introductory Price, 36 Cents.

II. NUMBERS APPLIED.

A Complete Arithmetic for All Grades. Prepared on the Inductive Method, with many new and especially practical features.

By ANDREW J. RICKOFF.

Introductory Price, 75 cents.

A distinct advance on anything yet prepared on the subject. A series fully up to the high standard of text-book literature that has been adopted for the Appleton publications, and written in accordance with the present needs of education. They are the result of mature thought and many years of practical experience in the school-room on the part of educators who stand among the first of progressive teachers : embodying not only that which has proved most successful in arithmetical work, but also some new and practical features that will place the series at the head of arithmetical text-books.

SEND FOR FULL PARTICULARS AT ONCE.

Sample copies, for examination, will be mailed, postpaid, to any teacher or school-officer, on receipt of the introductory prices.

D. APPLETON & CO., PUBLISHERS,

NEW YORK, BOSTON, CHICAGO, ATLANTA, SAN FRANCISCO.





UNIVERSITY OF ILLINOIS-URBANA



3 0112 037799779